DRCQURS

THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

A UNITED PUBLICATION VOLUME 5, NUMBER 11 [VOLUME (4) NOVEMBER 1994 • \$4.50



Green Section Report

USGA explores wildlife research, realigns regional offices, adds another to Sanctuary Program 13

Aeration Aftermath

A superintendent/mechanic tandem have perfected

Once a Superintendent...

Always a superintendent? We asked supers-turned-



THE TEAM APPROACH

At Francisco Grande Resort & Golf Club in Casa Grande, Ariz., superintendent Juan Rascon (right) and head pro Kent Chase work together to shore up the bottom line See this month's Public Arena, page 54.

COURSE MAINTENANCE

Focus on everyday people: The Family Stone 14 USGA's Latham offers advice upon retirement ... 18

COURSE DEVELOPMENT

Shorter designs with Baby Boomers in mind	3
Q&A with Dick Nugent	3
Maintaining design integrity: A lament	8

COURSE MANAGEMENT

On-course injury often means owner liability	9
Golf Resorts takes promotion on the road	. 43
Anaheim says "no" to American Golf	. 43

SUPPLIER BUSINESS

Legal Report: Scotts/Pursell settle; Toro sues 47 New RISE Chairman Novak takes the gavel 48 What's new in the marketplace 49

SIGN O' THE TIMES **GCSAA** actively pursues public-access members

By HAL PHILLIPS

AWRENCE, Kan. - To keep pace with changing demographics in the industry, the Golf

Course Superintendents Association of America (GCSAA) is poised to more actively include superintendents at public-access golf facilities.

The GCSAA's newly formed Public Golf Resource Group met in October to discuss ways the association could reach out more effectively to superintendents at daily-fee and municipal golf courses, according to Chief Operating Officer Joe O'Brien.

"We talked about better providing services to our members in the public sector and attracting new members from it," said O'Brien. "The numbers speak for themselves.'

Two-thirds of the nation's golf facilities are public access: daily-fee, municipal and resort. The percentage is climbing higher: From 1990 through 1993, 80 Continued on page 42





ORANGE COUNTY CONVENTION GENTER ORLANDO, FLORIDA NOVEMBER 11-12, 1994

A NATIONAL EXHIBITION AND GONFERENCE FOR OWNERS, SUPERINTENDENTS, MANAGERS, AND DEVELOPERS OF **PUBLIC-ACCESS GOLF FACILITIES** COURSE NGF

Allied golf associations back Expo

By MARK LESLIE

ORLANDO, Fla. - Hailing public-access golf as the fuel driving golf development and the game's key component, leaders in the industry have high expectations for Golf Course Expo.

The Expo, to be held at Orange County Convention Center here Nov. 11-12, is the only national trade show and conference targeting superintendents, managers and developers of public-access facilities. The U.S. Golf Association Green Section has helped develop the education Continued on page 22

Noise laws drown out **bottom** line

By PETER BLAIS

SOMERS POINT, N.J. - Rounds are down, overtime pay is up and the prospect of spending thousands of dollars on new equipment is looming at Greate Bay Country Club, all because of the town's noise ordinance here.

Up the coast at Greenwich (Conn.) Country Club, the grounds crew spent many days and lots of money creating a berm to muffle noise from its power equipment to try to keep ahead of the noise laws the suburban New York community is considering.

Farther south, Lochmere Country Club's revenues dropped the past two summers when it was forced to hold golfers off Continued on page 5



MIRROR, MIRROR

Who's the fastest growing management company of them all? A strong argument could be made for KSL Recreation, which owns and manages La Quinta Hotel and Resort, seen above. Sixteen months ago, KSL owned nothing. But after purchasing LaQuinta and other high-profile resorts, then acquiring The Fairways Group, KSL has established itself as a player in the ever-growing club management market. See page 43.

Experts decry inconsistent root-zone mixes

By MARK LESLIE

The contractor building a Texas sports field rejects the root-zone materials delivered for construction. The material is then trucked to a nearby golf course under construction, where it is accepted.

This incident, experts say, points to a problem infecting golf course construction: Sand and root-zone mixes shipped to project sites differ - sometimes wildly from samples approved in soil laboratories.

"It happens all the time," said Dr. Norm Hummel of Cornell University, who spent a sabbatical year in 1992-93 checking the status of the nation's soil testing for the

U.S. Golf Association. "In most cases, it's not intentional. But I'm sure there are situations where some maliciousness is involved.

"This is a tremendous problem," agreed Glen Watkins, president of Root Zone Mix in Muleshoe, Texas, who does quality-control work on sports field and golf course construction. "It can be a total nightmare to go on a job and check the sand and, lo and behold, it's entirely different than what it is supposed to be."

In the wake of court cases over failure of golf greens, course builders and soil Continued on page 40

MONITOR The On-Line Monitor screen shows

real-time information including which pumps are running, rate of flow, VFD speed and other pertinent data.

FLOW

DATALOG THE MAT IN THE REAL PROVIDENCE OF THE

0 NITO AYBACK

PUMP STATION MONITORING SYSTEM

FLOWTRONEX PSI has put remote pump station access at your fingertips. PumpLog™ interactive pump station monitoring software is the most powerful and user friendly remote monitoring system available today. Select this option for your new pump station and you'll never be more than a phone call away. This on-line graphical pump station interface provides instant access to vital pump station and irrigation data via direct burial cable or modem, freeing you to spend more time on the course - or anywhere else!

By providing actual flow and pressure values, PumpLog™ also helps you finetune your irrigation program and maintain optimum flow during irrigation cycles. Among it's many features, PumpLog[™] provides a record of station events indexed by date and time, allows you to easily change set-points, records pressure and flow over set periods and serves as a powerful diagnostic tool for our Product Support team.

Call to find out more about PumpLog[™] and all that it can do for you.

Only from the technology leader... FLOWTRONEX PSI

DAuto Off Manual Low Disch Override Auto FLOWTRONEX PSI E CORD DataLog automatically records actual pressure and flow values for any set period during you irrigation cycle and presents the information in an easy to-read graph forma

PUMPLOG

011

101.1

Pump B

Pinverter

Bypass

Pump C

Override

Off

R.W.P.#1

PUMPLOG

LIT 004A, 5-94

Complete system historical data

stamped with date and time, can be captured automatical and displayed when needed or accessed in real-time.

PEnable

011

102.2

Pump A

011

6.6

P.M. Pump

For more information and a complete product brochure call 1-800-786-7782 . •

@ 1994 FLOWTRONEX PSI Ltd

10717 Harry Hines Blvd. Dallas, Texas, U.S.A. 75220 214-357-1320 FAX 214-357-5861

Pumping Systems

NEWS IN BRIEF

LEELENAU COUNTY, Mich. -Opponents of the Homestead Golf Course near Sleeping Bear Sand Dunes National Lakeshore have won a major court battle. The U.S. Court of Appeals in Cincinnati has ruled that the U.S. Army Corps of Engineers and not the Environmental Protection Agency or Michigan Department of Natural Resources must grant a wetlands permit for Homestead developer Robert Kuras to build an 18-hole course at his resort. While the ruling doesn't necessarily kill the project, it means Kuras would likely have to spend many years and thousands more dollars obtaining Corps approval. It also overturns the state's approval of the project.

MASON, Ohio - An annexation petition filed with Warren County commissioners could lead to Mason's newest golf course on 300 acres north of the city. Campbell-Rhein Development Co. wants to build upscale homes around a golf course similar to those around the Golf Course at King's Island. Scot Lahrmer, Mason city manager, said the development would impinge on the city's thoroughfare plan.

KANSAS CITY, Mo. - Spectrum Communications has been selected by the U.S. Golf Association to handle a communications program to enhance the environmental image of golf. Spectrum's program will target course superintendents, architects, developers, regulatory officials, environmental groups, golfers and the public.

ROSES ARE RED...

... RIPLEY, W.Va. - Pro golfer Gardner Dickinson has taken over design of Sycamore Creek Golf Course here, boosting the initial nine-hole venture to 18. Keith Marks, Dickinson's former associate, is the property owner. Marks and Dickinson envision course opening in the fall of 1995.

Second-class postage paid at Yarmouth, Maine, and additional mailing office. Golf Course News (ISSN 1054-0644) is published monthly by United Publications, Inc., 38 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 informa-tion. Copyright 1994 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, Golf Course News, P.O. Box 997, Yarmouth, ME 04096. Back issues, when available, cost \$5 each within the past 12 months, \$10 each prior to the past 12 months. Back issue orders must be paid in advance either by check or charged to American Express, Visa or MasterCard.

Golf Course News is distributed in the U.S. without charge to qualified personnel of golf course facilities and to golf course builders, developers and architects. Subscriptions to Canadian golf facilities cost \$25 annually; other paid subscriptions to the U.S. and Canada cost \$45. 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 #102



Roses may be a common sight around the golf course clubhouse, but the Oregon Golf Club outside

Portland proves the "queen of flowers" can be a visual accent and different sort of hazard on the

course itself. All-America Rose Selections, a non-profit association of rose producers, recently

honored this landscaping achievement by presenting the Oregon Golf Club with the Grand Prize

for a commercial development in its national 1994 Landscape With Roses Contest. Designed by

PGA player Peter Jacobsen and golf course architect Ken Kavanaugh, Oregon Golf Club features

3,500 rose plants at various locations throughout its 178-acre layout situated atop Pete's

Mountain in West Linn. The 12th hole at the Oregon Golf Club utilizes more than 3,000 roses

to provide golfers with a challenging and breathtaking hazard.

Laminated

SHELTERS

Glued-Laminated Wood

Manufacturer in the U.S.

structures for over 50 years

· Ready for Fast Erection

DESIGN TRENDS

Classic Golf Group targets 'booming' senior population

By HAL PHILLIPS

INTER HAVEN, Fla. - Here, in what Leonard deBoer calls the "Retirement Corridor," senior

golfers struggle to cope with courses measuring 6,500 yards or more, from the white tees. As president of Classic Golf Group, Inc. - a turn-key organization specializing in the development of senior-friendly golf communities - deBoer hopes to change all that.

"We've conducted focus groups with senior golfers who live in senior communities," deBoer explained. "They're looking for courses somewhere between the

ever-longer championship courses we have today and the executive courses... We're aiming for a Cadillac in a small body — keeping the same tee shot challenges, but moving



Leonard de Boer the tee box up. Instead of a carry between 220 and 240 yards, it'll be 170 to 180.

"We're also looking at the enormous growth in the number of over-50 golfers. In a year and half, we'll start seeing all the Baby Boomers turning 50. Ten or 20 years down the line, what are these people going to want? They're not going to want to be beaten to death on the golf course."

With design advice from Sam Snead, Classic Golf Group (CGG) offers master planning, golf course design, course construction and club management services - all shaped around courses measuring between 5,400 and 5,600 yards.

The firm's first contract, at Royal Highlands in Leesburg, provides for CGG's full range of services. Construction will Continued on page 50

- · Highest Quality-Rigorous Inspection
- 2 Strategically Located Plants Morrisville, NC & Magnolia, AR
- Custom Design & Engineering Available
- Direct Distribution Throughout the U.S.

Combined engineering with the aesthetics for greater versatility . . .



Post Office Box A • 5724 Koppers Road Morrisville, NC 27560 Tel. 919/467-6151 • FAX 919/469-2536

N.Y. firm enters high-tech golf market

ROCHESTER, N.Y.—Anew company, Pegasus Environmental Ltd., is flying high in its technological venture to keep golf courses greener.

Founder-owner Zeke Hurd works with scientists at Rochester Institute of Technology and Cornell University to develop technology to interpret infrared photos of "stressed" grass and vegetation.

Hurd is undertaking a pilot project at Oak Hill Country Club to prove the technology. He plans 400 flyovers of 100 golf courses the first year. He said Pegasus provides a better and more complete picture of what areas are stressed by pests and environmental programs than can be obtained by walking around at ground level.

Hurd said course managers can use the information to reduce annual chemical bills from \$5,000 to \$40,000.

Study finds courses are safe for golfers

BELLE GLADE, Fla. — Pesticide use on golf courses poses little danger to golfers, according to University of Florida researchers who teamed with the United States Golf Association and 10 other universities in a \$2.7 million, USGA-funded environmental study to determine the mobility, persistence and dislodgeability of pesticides.

Their conclusion? "Really minimal based on what we've seen so far," the report states.

UF soil scientist George

Snyder and UF turfgrass scientist John Cisar conducted their studies on a USGA-spec green. One phase of their work determined the amount of pesticide residue left on used golf shoes, golf pants and golf balls.

The scientists walked on the pesticide-treated turf, knelt with their pants touching the grass as if they were lining up shots, and even putted balls. They also measured what amounts of pesticides remained in the soil and in runoff groundwater. "We concluded that most of the organo-phosphate insecticides that are sprayed on the green are strongly absorbed into the golf courses' thick thatch layer, which is the dead and dying organic matter on top of the soil surface and just below the grass," Snyder said. "Even less of the pesticide penetrated into the soil, and very little seeped into the percolated water."

The USGA has spent \$8 million the past 12 years to fund 46 projects at 28 universities.

Both sides reach agreement on Kiawah remedy

CHARLESTON, S.C. — The federal Resolution Trust Corp., which owns Kiawah Ocean Course, site of the 1991 Ryder Cup matches, has reached virtual agreement with two regulatory agencies seeking a remedy of course wetlands damage dating back to 1990.

Restoring portions of the course to natural vegetation is the main thrust. Cost of buying 140 acres of land and paying an "administrative assessment" may top \$500,000.

The Army Corps of Engineers and the Office of Ocean and Coastal Resources Management, a division of the state Department of Health and Environmental Control, devised the wetlands plan.

The RTC frowns on such plan aspects as turning a large portion of a sand hazard in front of the green on the fourth hole into vegetation, altering a portion of the 10th hole and creating 2.8 acres of wetlands.

A \$27 million sale to the Audubon Society of New York — backed by a partnership of the Kiawah resort owner and its major developer — collapsed last summer.

Nicklaus to design Tenn. park courses

JACKSON, Tenn. — Four state parks in Tennessee are ticketed for golf courses, two with the Jack Nicklaus architectural stamp.

The Tennessee state legislature has given bond authorization for construction. Chickasaw, just west of Henderson, could be in play in two years. Next is Natchez Trace, near Carroll.

Golf Services Group/Whitley Developmental Group will form Tennessee Golf Inc. to operate the four courses.

The group is putting up a \$2 million letter of credit.

Nicklaus Design of North Palm Beach, Fla., will design the courses to be built by Wadsworth Golf Construction.



NEWS

Indianapolis seeks to privatize muni layouts

INDIANAPOLIS, Ind. — Four of the city's 11 operating municipal courses were targeted most in need of improvement or addition, but the price tag "in the millions" has been tabbed too costly.

City Parks Director Leon Younger said the city will seek proposals from private enterprise to make improvements at three of the courses in exchange for contracts to operate them for 15 years. The city already is negotiating with Ron West, the pro at Winding River. The others are Eagle Creek, South Grove and Riverside.

The pros pay the city a percentage of their revenues. Last year, the pros returned to the

city \$902,000 out of total revenues of \$6.9 million. Under current contracts, money is insufficient to make all improvements. Plans call for adding nine holes to Eagle Creek and Winding River.

The city hopes to install new irrigation systems, upgrade the greens and make new cart paths at South Grove and Riverside. Each project will cost more than \$1 million.

Indianapolis businessman James O'Connor has proposed buying all 12 municipal golf courses for \$25 million. One course, Coffin, is not in operation.

Noise laws Continued from page 1

the course until 7 a.m. to comply with Cary, N.C.'s regulations.

"Noise ordinances are a growing problem. But they tend to sneak up on people in our industry because they are more concerned about air quality and pesticide issues," said John Gillan, executive director of the Professional Grounds Management Society. PGMS lists many course superintendents in its ranks.

Cary's leaders were targeting car stereos and construction



ONE INSECTICIDE SATISFIES EVERYONE IN THE GOLF WORLD. INCLUDING THOSE WHO DON'T GOLF.

Maintaining a showplace golf course goes beyond beautiful turf. There's the birds of the air and the fish in your water hazards to consider, too. So an insect control program that's less toxic to the wildlife on your course is important. That's where MERIT® Insecticide comes in. MERIT lets you control grubs and other insects while using remarkably low levels of active ingredient.

In fact, MERIT is effective at rates 85% to 96% lower than other soil insecticides. And when applied in the spring to control billbugs and *Hyperodes* weevils, MERIT provides enough residual to effectively control grubs throughout the summer. To find out more, contact Miles Inc., Specialty Products, Box 4913, Kansas City, MO 64120. (800) 842-8020. Do it for those in golf who actually like landing in trees and splashing in water hazards.



© 1995 Miles Inc. Printed in U.S.A

crews with their 7 a.m.ordinance. But a Lochmere neighbor noted the law also applied to golf courses, which traditionally sent mowers out as early as 5:30 a.m. to get ahead of golfers.

Lochmere labored under the regulation for a year and a half, Totten said. The first tee times were pushed back from 6:30 a.m. to 7 a.m., cutting into revenues and golfer satisfaction. Head pro Randall James explained the problem to the Town Council and in August it approved an amendment allowing golf courses to begin grooming greens at 6 a.m. from May 1 to Aug. 31.

The situation hasn't come to as happy a conclusion in Somers Point. The town passed its 7 a.m. noise ordinance four years ago with trash collectors and construction crews in mind, according to Greate Bay superintendent David Geyer.

Greate Bay continued mowing as early as 5:30 a.m., unaware the law applied to golf courses. A resident voiced concerns last fall. Geyer responded by keeping mowers away from areas where houses bordered the course during early morning.

The matter came to a head in mid-July when a summons was issued. The course went before the Council, seeking permission to begin mowing a half hour earlier during spring and summer.

The Council voted unanimously for the amendment on a first reading but later reversed itself under political pressure.

"It became sort of a David-versus-Goliath thing," said Geyer. "The little guy was out to slay us."

Nearby residents offered a minor compromise allowing mowing to begin early during the annual LPGA tournament and 10 yearly charity events.

But keeping mowers and golfers off the course until 7 a.m. reduced rounds and increased overtime pay, Geyer said. The extra labor time results from maintenance staff having to stop working while golfers play through.

Geyer is hopeful councilors will be more receptive to changes following November's election. He is also investigating purchasing quieter-operating electric greens mowers, a recent innovation. "Now that fall is here, the major complaint is leaves," Geyer said.

That's also the case in Greenwich, Conn., where local officials have limited use of gas-powered leaf blowers from 8 a.m. to 6 p.m. during the week and 9 a.m. to 3 p.m. on weekends. A local group is even seeking a complete summer ban on blower use.

Greenwich CC superintendent Greg Wojick said the club received a noise-ordinance violation last summer. Police warned that next time, the equipment operator would receive a \$75 fine.

"We'd gotten some complaints in the past and built that berm to try to muffle any noise," Wojick said. "But it didn't seem to help much.

CIRCLE #103

95S19A0020

Army wins Presidio battle

SAN FRANCISCO, Calif. — The Army appears to have outflanked the National Park Service in the battle for Presidio Golf Course control.

Fighting a delaying action to retain the precious ground over which it has enjoyed exclusive control for nearly a century, the Army seized upon a tactical error to press its mastery of the terrain.

The Park Service knew for five years it was scheduled to inherit the Presidio as the Pentagon swung its budget-slashing sword. Yet it had neither hired its own operator nor sought bids for one.

The Army said it needed a source of money to pay for its base social programs. The Park Service, facing Congressional heat for the estimated \$38 million price tag to annually operate the Presidio, sees the course as a \$1.6 million profit center.

The Park Service has the option of taking over the course in 1999, but would have to pay the Army for part of the cost of a new course irrigation system. And the Park Service may press for an estimated \$350 million in rehabilitation projects for buildings.

Congress understandably would not be pleased. The Presidio Golf Club is an invita-

Seaside plans to take control of Fort Ord layouts

SEASIDE, Calif. — This city and the Army are huddling over Seaside's proposal to assume operation of Fort Ord golf courses through a three-year interim lease.

The Army has put a \$1 million price tag on the courses, which are deteriorating because they are in a state of transition, said City Manager Tim Brown.

Brown said the city considers future development around the golf courses more important than the courses themselves.

Brown said the city wants fees collected for use of Fort Ord golf courses kept separate from other tax revenues that are to be shared among the entities. The other revenues — property, sales, gasoline and other taxes —are to be used for rebuilding the post's infrastructure, including roads and utilities.

TENN. INSECTICIDE PROGRAM HELPS EASE SKUNK PROBLEM

VALPARAISO, Tenn. — Skunks that last year did much damage at Forest Park Golf Course now are close to being skunked by consultant Jim Cavanaugh. A fairway dose of insecticide in the spring killed grubs and destroyed a major food source. Urban construction is blamed for the skunk problem. The club gets 20,000 rounds of golf a year for its members in exchange for helping to pay for the course. The military gets the other 38,000 rounds.

Holding the Presidio GC high ground comes at extremely low cost — unlimited use for Army personnel for as little as \$18 a month.

Calif. city fast becoming a golfer's paradise

PASO ROBLES, Calif. — Paso Robles is coming to the fore as a golf center. Developer Jack Munari has requested that the City Council support the development and construction of an 18-hole public golf course on the 884-acre Santa Ysabel Ranch along South River Road south of the city.

Owners of the Hunter Ranch Golf Course on Highway 465 East earlier asked the council to support annexation of more than 200 acres for the golf course, 250 acres of open space, and 400 acres for home sites.

Munari would sign an annexation agreement

ensuring that the golf course would be developed before houses are built. The houses make the golf courses and resort economically feasible for the developer.

There could be four 18-hole golf courses within the city limits by the turn of the century if other planned developments are completed, according to city officials.

Chalk Mountain Golf Course operator Rudy Duran has proposed a new 18-hole golf course near the Paso Robles Airport, and the City Council is negotiating for the purchase of Munari's Paso Robles Golf and Country Club.

You deserve credit for helping make the impossible possible

Creating and maintaining the perfect golf environment is a difficult task. Sometimes it seems almost impossible. Especially when you consider the tools, both physical and financial, needed to keep a course manicured.

At John Deere Credit, we understand the obstacles you face every day. That's why we offer a variety of equipment-related finance plans with terms to match your needs. Whether you need a lease for that new

NEWS

Dennis Walters to receive NGF's coveted Graffis Award

JUPITER, Fla. - Dennis Walters, a physically challenged golfer who has inspired hundreds of thousands of golfers and non-golfers alike, has been named the 1994 recipient of the National Golf Foundation's Graffis Award

The award recognizes outstanding contribution to the game in the tradition of Herb and Joe Graffis, who co-founded the NGF in 1936.

"We are delighted to have this opportunity to recognize Dennis," said NGF President and CEO Joe Beditz.

The NGF will present the award to Walters Nov. 19 at the Scottsdale (Ariz.) Conference Resort during Golf Summit '94.

Walter's charisma and positive philosophy have encouraged many who otherwise wouldn't have tried the game. Along the way he proved that golf can indeed be played by the physicallychallenged.

An accomplished college golfer, Walters was on his way to a professional golf career when a golf car accident in 1974 left him paralyzed from the waist down. He faced the prospect of never playing golf again.

He was back on the course within nine months. He came up with the idea of mounting a swivel stool to the side of a golf car. Using only his upper body, Walters now hits an array of shots that have earned him praise from such legends of the game as Jack Nicklaus.

In recognition of his remark-

able comeback, Walters won the Golf Writers of America's Ben Hogan Award in 1978. The only person paralyzed below the waist who earns a living as a professional golfer, he joined the likes of Gerald Ford, Gary Player and Bob Hope, when he recently became an honorary lifetime member of the PGA of America.

Since 1978, Walters has staged "The Dennis Walters Golf Show" at scores of PGA and LPGA Tour events, corporate meetings, trade shows and golf clubs.



piece of equipment, a highly specialized installment finance program to open a new course, or revolving credit for parts and service, John Deere Credit is ready to help. Finding out details is easy. It only takes one call to your John Deere distributor. Or phone 1-800-468-8517, ext. 891. JOHN DEERE

Because while we may not be able to give you the recognition you



You Deserve Credit for Buying the Best™

Arizona layout set to open by early December

SCOTTSDALE, Ariz. -Grayhawk Golf Course's 18-hole layout, Talon, is scheduled to open Dec. 1. Golfer David Graham and architect Gary Panks are the designers.

The landscaping feahundreds tures of saguaros and almost 2,000 native desert trees. Two lakes have been created.

Water comes into play on the island green of the 17th hole and on the par-5 18th.

A stunning four-level waterfall separates the 18th hole from the par-4 10th.

Maine town wants out of golf business

BATH, Maine - Seeking to avoid a financial bath, the city is seeking ways to recover \$1.3 million borrowed last year by the Bath Country Club for a second nine.

The addition is considered an artistic success. Now comes the dollar challenge. Councilors paid a consultant \$15,000 to determine whether the club could meet its obligation. The city owns 65 percent of the club.

The club ran out of money last August. Club officials are now seeking a \$200,000 line of credit.

R.I. developer plans to build next year

JAMESTOWN, R.I. - Developer Robert Clarke expects it to take a year to complete the application process for a \$5 million state loan guarantee for his renovated Beaver Tail Golf Course.

A. W. Tillinghast-designed Beaver Tail opened in 1925 as a posh nine-hole private club, but closed in 1947. Foliage and waterways reclaimed the land, and several summer residents and the town purchased parts of the land for conservation.

Corrections

Because of misinformation supplied Golf Course News, an error appeared beneath a photo of Rees Jones' Huntsville (Pa.) Golf Club on page 3 of the October edition. The course was built by Calgolf, Inc., while Tanto Construction installed the irrigation.

Also in the October edition. because of a reporting error, a mistake appeared in the story on pumping stations (page 22). Carroll Childers Co. played no role in the development of variable frequency drive.

Golf Course Expo, not just another trade show

lmost exactly one year ago, Golf Course News announced the launch of Golf Course Expo, the only trade show and conference for owners, managers and superintendents at public-access golf facilities. Almost immediately, we heard the familiar chorus: "Geez, not another trade show!" Apparently, this was a repeating chorus, because we've confronted this refrain many times over the last 12 months.

This is a touchy subject because, to be perfectly candid, there are too many trade shows in the golf course industry. No wonder people are tired of them. Most are ill-defined, misdirected and focused at the wrong end of the industry.

When thinking about Golf Course Expo, the proper refrain shouldn't be, "Geez, another trade show," but rather, "Wow, a new market!"

Truth is, until this year, there

has been only one trade show that successfully serves its market sector on a national basis. The Golf Course Superintendents Association of America (GCSAA) show has catered to the private club market extremely well for

many years, and only a foolhardy organization would attempt to compete with GCSAA on this front

But there is another, larger front to consider: Public-access, i.e. daily-fee, resort and municipal courses.

Private golf clubs, while they represent a strong portion of the golf market, account for only onethird of the nation's golf facilities. Further, the number of private clubs is dropping, according to National Golf Foundation statistics, while the number of public-access facilities is growing



80 percent of the courses opened over the last five years have been public access.

Put simply, the market is changing. Already, two-thirds of the 14,600 golf courses in America are public-access.

Serious change is difficult for any industry to accept, much less foresee. However, as Golf Course News has been reporting for more than three years, publicaccess represents the future for this market — and golf course owners, associations and manufacturers will ignore this at their peril.

Even GCSAA has acknowledged the shift with its new concentration on attracting members from the public-access sector (see story, page 1).

In one way, Golf Course Expo is just another trade show. But

hand over fist — a full it's the only trade show that targets the largest, fastest-growing portion of the golf course industry. And this majority portion of the market has distinct needs; needs that aren't currently being served; needs that will be met at Golf Course Expo.

For example, exhibitors need to understand that buying patterns are different in the publicaccess sector. Put simply, owners and managers at public-access facilities have more input than their counterparts at private clubs. Appropriately, owners, CEOs and general managers account for a full 47 percent of the Golf Course Expo attendee list.

From an educational standpoint, superintendents and owners at public-access courses have different needs. Ask superintendents who, during their careers, have cared for both daily-fee and private courses. They will tell

Continued on page 12

We mustn't forget: Greens, rootzones are living organisms

Mark Leslie

t's hard to believe the claim that sports field contractors are more diligent than golf course builders about using quality root-zone mix (See page 1 story).

As architect Bob Cupp said about scrutinizing the root-zone delivered to his projects: "Billy Fuller, my agronomist, will shame the contractor into performance, and most of them don't need it.

"The certified members of GCBAA [Golf Course Builders] Association of America] are all terrific. They're great. When we say we want to do something, they do it.

"Besides," he added with a laugh, "if they didn't, Billy'd maim 'em."

A major part of the problem is the simple fact that builders are dealing with living organisms in this process of greens construc-

To the editor:

I noted with great interest

an article on Fort Wayne's

(Fla.) Pine Valley Country

Club's appreciation party for

the grounds crew [GCN Sep-

tember '94]. That was great.

mental in putting the party

on, Mr. Hughie Johnston.

Hughie played for at least 10

years for the Fort Wayne

Zollner Piston fast-pitch soft-

Mr. Johnston is in the Hall

of Fame. And in the opinion

of the team I played for, the

State Farm Chiefs, Hughie

But what struck my fancy was the man who was instrution. They're blending peat moss - which is fairly acid (3.0 pH) with silica sand or calcarious sand that is inert and, if it's calcarious, has a pH of 7.8 to 8.2 or higher. The organic matter hasn't broken down managing editor

because of its acidic environment. But now it is placed in a neutral environment where it will start to break down. Plus, fertilizers and water will be added to the equation.

Does anyone know what this recipe evolves into?

Could be a good research project for some enterprising university professor or PhD candidate

Until then, is the golf industry putting its superintendents in a crap shoot? Sounds to me like that old schoolyard game, Dodge Ball... better known in some parts - and perhaps more aptly - as War Ball.

"My fundamental feeling is that the most important thing to having great putting greens is to have a

great superintendent," said Mike Hurdzan, a golf course architect and PhD guy himself. "We have seen superintendents grow every kind of bentgrass you can think of on every kind of material you can think of, and if the guy understands his craft, you are going to have great greens.'

No matter how well constructed a putting surface is, if the super isn't "lucky enough to understand what's happening in this organic soup, he could have problems," he said.

Hurdzan said the biggest prob-

THE PLEASURE

WAS ENTIRELY OURS

Please accept our sincere

thanks for your Tee Spon-

sor donation at the 1994

Scholarship & Research

Tournament [Sept. 20, Cape

Arundel Golf Club, Ken-

I his money will go a long

Again, thanks for your

Patrick E. Lewis, CGCS

Superintendents Assoc.

Falmouth C.C.

Maine Golf Course

president

way in helping a future turf

student's education and di-

agnosing turf problems.

contribution.

nebunkport, Maine].

To the editor:

lems he has seen in root-zone mixes have been in the micronutrient balance. "It's never the big things that are out of kilter," he said. "It's the little things - the magnesium, the manganese, the copper, the trace elements. Magnesium is the one I see the most often. It causes a problem with establishing greens in that there is usually a magnesium imbalance - especially with calcarious sand, which is high in calcium, low in magnesium, and in that imbalance the center of the chlourofil molecule is magnesium.

"You have to have magnesium there for the plant to make chlorofil. So we end up using epsom salts in order to try to balance that out. It's a matter of taking soil tests, using your knowledge of how grass looks, taking a calcium-to-magnesium ratio and making adjustments."

Did you all stay with that? We'll have a short quiz in the next issue.

...

Ask when they first decided they wanted to design golf courses and some present-day architects sound like golf's answer to the kid who decides he wants to be a firefighter and ride that big red machine.

· Said Dr. Michael Hurdzan, who earned bachelor's, master's and doctoral degrees all with the goal of designing golf courses: "I knew [my career] from the time I was 13 and went to work for Jack Kidwell and saw a golf course laid out on an aerial photo. I was so captivated by what I saw that, even at 13, I said that was what I wanted to do. No question, that's where I was headed." • The defining point of the life

of Jan Beljan, a lead designer for

Continued on page 12

Publisher Charles E. von Brecht

Editorial Director Brook Taliaferro

Editor Hal Phillips

Managing Editor Mark A. Leslie

Associate Editor Peter Blais

Contributing Editors Terry Buchen, CGCS, MG Vern Putney

Editorial Advisory Board Raymond Davies, CGCS Virginia Country Club

Kevin Downing, CGCS Willoughby Golf Club Tim Hiers, CGCS

Collier's Reserve Dr. Michael Hurdzan Hurdzan Design Group Mary P. Knaggs, CGCS

Hazeltine National GC Roger Maxwell Management Consultant

James McLoughlin The McLoughlin Group

Kevin Ross, CGCS Falmouth Country Club Brent Wadsworth

Wadsworth Construction **Production Manager** Joline V. Gilman

Circulation Manager Brenda Boothby

Editorial Office

Golf Course News PO Box 997 38 Lafavette Street Yarmouth, ME 04096 207-846-0600; Fax: 207-846-0657

Advertising Office

National Sales: Charles E. von Brecht 227 Second Avenue North St. Petersburg, FL 33701 813-898-7077; Fax: 813-825-0923

Western Sales:

Robert Sanner Western Territory Manager 2141 Vermont Lawrence, KS 66046 913-842-3969; Fax: 913-842-4304

Marketplace Sales: Mary Anderson 813-898-7077; Fax: 813-825-0923

Golf Course Expo Sales Michael Lafaso 207-846-0600; Fax: 207-846-0657

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 © 1994 by United Publications, Inc. All rights reserved and reproduction, in whole or in part, without written permission from the publisher is expressly prohibited.

ball team.

FROM THE LOST & player in the world. FOUND DEPARTMENT

hitter I ever faced. And most of all, he was a fine gentleman.

Green Chairman Sugar Mill Country Club

New Smyrna Beach, Fla. Ed. After years of trying but failing to locate Mr. Johnston, Mr. MacPhail finally located him after reading the abovementioned story. Though we don't see ourselves as being in the reunion business, Golf Course News is glad to have been of service.

Letters was the greatest all-around

He played first base (with a fielder's glove) and was the best

It's no surprise to me that he is a "force on the course!" I congratulate him - again!

Don MacPhail

Managers & owners take heed: You may be liable for on-course injuries

of touring profes-

sional golfers. A good

example is Duffy vs.

Midlothian Country

was a spectator at the

1972 Western Open, a

Club. The plaintiff

regular PGA Tour

event co-sponsored

by the PGA Tour and

By GARY CRIST

Legal liability for personal injury and property damage due to an errant or "bad" golf shot seems to be a widely misunderstood concept among golfers, professionals, facility operators, insurance companies, and others involved in the golf industry.

The most common misconception is that the golfer who hits the shot is usually responsible for any resultant injury or damages. Often, however, it is the course operator, designer or tournament organizer who is ultimately found liable.

Reported cases holding the golfer liable for the results of a bad golf shot are rare. Most decisions support the proposition the golfer fulfills his or her duty of due care by:

• Not "hitting into" other players; and.

· Hollering "fore" if an offline shot heads toward other people.

Although it is understandable why course operators and insurers embrace the notion the golfer is responsible for the consequences of a wayward stroke, the law generally holds otherwise.

Liability in "bad golf shot" cases follows traditional tort liability principles. To recover, the plaintiff must show a breach of duty on the part of the defendant and damages resulting from the defendant's wrongful act. Interestingly, the courts have been reluctant to find any breach of duty or negligence in the mere hitting of a bad or wild golf shot, absent evidence the golfer either intended or should have foreseen the resultant harm.

A representative case is Rinaldo vs. Springville Country Club. In Rinaldo, the plaintiffs were driving a car along a road next to the 11th fairway. The defendants sliced their tee shots over trees separating the fairway from the road. In upholding the trial court's judgment favoring the golfers, New York's Supreme Court stated:

"The Court of Appeals [state supreme court] has held that the fact that a golfer hits a 'bad shot' that either slices or hooks is not sufficient to permit an inference of negli-

Gary Crist is an attorney based in West Palm Beach, Florida, who specializes in sports and entertainment law. He also serves as counsel for the National Golf Foundation. From 1989 to 1994, Crist was the senior director and general counsel for the PGA of America. This article is condensed by permission, Club Director magazine, August 1994. Copyright 1994, National Club Association; all right reserved. GOLF COURSE NEWS

gence. The mere fact that a ball does not travel the intended course does not establish negligence. Even the best golfers cannot avoid an occasional 'hook" or 'slice.' Rather, the Rinaldos must prove that defendants Vogel and McGovern failed to use due

care in striking the ball." Other courts have applied a

similar rationale, even in cases



Gary Crist Western Golf Association (WGA).

> The plaintiff was standing in the rough between the 1st and 18th fairways, near a conces-

sion stand, watching play on the 1st hole. The plaintiff was struck in the eye by Dow Finsterwald's hooked tee shot from the 18th hole. Although the plaintiff recovered damages from the tournament sponsor, the jury specifically exonerated Finsterwald under the rationale that even a PGA Tour-caliber golfer occasionally hits an off-line shot, and to do so is not in and of itself negligence.

So, who is responsible when

a wild golf shot causes damage or injury?

As indicated in Duffy, the defendant most likely to be liable is one who can be shown to have breached a legal duty. In Duffy it was the WGA, the tournament organizer, not Finsterwald, that permitted the plaintiff to stand in an area where it was reasonable for her not to be "on guard" against shots hit from the 18th tee. One wonders whether Mrs.

Continued on page 12



Treat Your Turf With POLYON® Controlled Release Potash This Fall...

Potash Helps Winter Survival

Turf researchers have long known the benefits of applying potassium to turfgrasses during the fall months. Potash helps turf to better withstand bitter cold winter weather which can result in severe turf damage, better known as winter kill. But until now, there has never been a choice in controlled release potassium fertilizers for a variety of turf applications.

Extended Potash Feeding

POLYON coated potash products have a unique osmotic release that slowly meters the nutrient to your turf over time, allowing for a significantly improved plant uptake of potash. Leaching therefore is virtually eliminated, which is better for the environment. But the real winner will be your turf, which will be able to better survive the cold months.

POLYON **Coated Potassium Sulfate** 0-0-47 Micro Size

Choose Your Potash Source

Pursell's POLYON Technology offers three different potash sources in three different size ranges. Whether for greens, tees, fairways or roughs, POLYON Technology offers a potash source, available in potassium sulfate, potassium nitrate, or potassium chloride (fairways only). No other fertilizer technology offers so much versatility to the turfgrass professional.

Another Pursell Innovation

POLYON Technology was developed and is manufactured by Pursell Industries, the world's leading and foremost producer of coated controlled release fertilizers. Pursell is also one of America's leading producers of sulfur coated fertilizers. Pursell produced technologies are marketed world-wide by leading formulators and their distributors.

POLYON **Coated Potassium Nitrate** 12-0-42 Mini Size

POLYON **Coated Potassium Chloride** 0-0-57 Regular Size

(Also available in mini and regular sizes)

Pursell's and POLYON are trademarks of Pursell Industries, Ind Sylacauga, AL, 1-800-334-8583

(Also available in regular size)





Before Arnie's Army sees the first fairway at Bay Hill, this army has seen them all.



The 18th Fairway at The Bay Hill Club; Arnold Palmer and Superintendent Dwight Kummer

As a player and course designer, Arnold Palmer is legendary. In addition to conquering the Masters, British and U.S. Opens, he counts victories in 61 PGA tournaments. His style and personal commitment to the game have earned him a loyal army of followers. That same commitment has led him to choose Jacobsen.

Take our fairway mowers for example. They deliver flawless performances at The Bay Hill Club, Arnie's home course and site of the Nestle Invitational.

The ST-5111[™] offers the productivity of an 11-foot cut with quality results due to its amazing balance and touch.

The LF-100[™], with our patented Turf Groomer[®] fairway conditioner, delivers a tournament-quality cut to show off every nuance of your fairways.

While the LF-3810[™], the original heavy-duty lightweight, provides the power to cut every other day with a beautiful finish even the pros can appreciate.

The entire line produces results anyone can be proud of. Because as Arnie knows, when you've got an entire army watching your every move, it's important to look your best.

THE PROFESSIONAL'S CHOICE ON TURF.



Jacobsen Division of Textron Inc.



Take heed of on-course liability

Continued from page 9

Duffy would have recovered against WGA if Finsterwald's shot had come from the first tee, i.e., the hole she was observing. Logically, those facts would produce a much tougher plaintiff's case in view of traditional notions of assumption of risk, i.e., arguably, spectators assume the risk of injury from shots they are or should be watching.

In sustaining the verdict, the

court stressed she was standing near a concession stand and reasonably believed herself to be out of harm's way. Consequently, the WGA's decision to locate the stand in an area reachable by wayward tee shots was a negligent act.

The lesson from these and similar cases is that course operators, designers, tournament organizers and sponsors need to anticipate wayward shots and take appropriate measures to eliminate or

reduce resultant liability. This is most often accomplished by maintaining liability insurance coverage and posting appropriate signage and warnings.

At PGA Tour events, measures to manage spectator injury risks are addressed through a standardized tournament liability insurance package and ticket "disclaimer" language designed to alert the ticket holder to the risk of being struck by a bad shot.

Generally, this insurance is purchased by the tournament sponsor to cover tournament-

specific incidents related to the public.

Regardless, the prudent course should periodically examine its own property casualty policy to ensure adequate coverage of regular activities, including memberguest events, charity outings, and daily play.

Here is an example of the ticket disclaimer language common at PGA Tour events:

Ticket holder acknowledges and expressly assumes the risk of injuries incidental to attending a professional golf tournament, including the risk of injury due

to errant or misdirected golf shots.

Your club should also adopt or review existing safety policies as part of its annual risk-management program. The operation of golf cars, the posting of warning signs, and the clearance of the course before a storm are a few areas which need reviewing and standard procedures.

Although yelling "fore" may fulfill the golfer's legal duty, facility operators and tournament organizers face a more complicated risk-management challenge.

Leslie comment

Continued from page 8

Tom Fazio? "My father designed and supervised construction of the course where I grew up. I remember watching him doing greens diagrams in preparation for the following day."

 For Jack Snyder, a Class AA member of the Golf Course Superintendents Association of America and a fellow of the American Society of Golf Course Architects, growing up on a golf course was one way to start at the bottom and work his way up.

He recalls how he did "all the nasty jobs around the place from cleaning sand traps on the course to cleaning grease traps in the clubhouse.'

Saying she has the advantage of understanding the superintendent's predicament, Beljan said: "I've had my share of chastisements by club members because this or that wasn't right on the golf course," she explained. " It's a little different story when you're responsible for a job, period, rather than when you have 300 bosses.

"If you are ever in that position, it makes it easy to understand why some superintendents are at a club for a very long or very short time: It depends on the members."

Phillips comment Continued from page 8

you the differences: More traffic at public-access courses; more profit motive; different staffing challenges. These issues and more will be addressed during the Expo's agronomy sessions.

Competition is the number one issue for owners and managers at daily-fee, municipal and resort facilities. That's why the Expo's management sessions feature seminars concentrating on marketing strategies, costcutting and creative purchasing.

Different needs. Different approaches to meet them.

Yes, Golf Course Expo is another trade show. But the industry needs another trade show to serve this emerging new market.

It's now November 1995. The time is right for Golf Course Expo.

GOLF COURSE NEWS

The Andersons Leads The Nation In Providing DowElanco Products For Professional Turf Care Markets

The Andersons, manufacturers of TeeTime® turf care products for golf course superintendents and Andersons Professional Turf® products for lawn care operators and other groundskeepers, is now a leading provider of high-quality/ high-performance DowElanco product formulations.

Having forged their business relationship over a time span in excess of 20 years, The Andersons has incorporated a broad range of DowElanco products to prevent or solve specific turf care problems. High-quality products have also been developed for use on ornamentals.

The following chart provides a basic product offering guide but The Andersons is quick to point out that their technical capabilities for custom blending other formulations are virtually limitless in their state-of-the-art turf care products plant. Fully detailed product information is available.

Fertilizers & DowElanco	Herbi	cides	
Fertilizer with 0.47% Dursban	Treflan Granular	5.00%	
Fertilizer with 0.52% Dursban	Team Granular	2.00%	
Fertilizer with 0.65% Dursban	Balan Granular	0.58%	
Fertilizer with 0.71% Dursban	Balan Granular	0.92%	
Fertilizer with 0.92% Dursban	Balan Granular	1.72%	
Fertilizer with 0.75% Surflan	Balan Granular	2.50%	
Fertilizer with 1.00% Surflan	Confront	4x1 gal.	
Fertilizer with 0.57% Team & 0.57% Dursban	Confront	30 gal.	
Fertilizer with 0.87% Team & 0.58% Dursban	Gallery 75DF	4x1 gal.	
Fertilizer with 1.15% Team & 0.57% Dursban	Snapshot TG	50 lb. bag	
Fertilizer with 0.57% Team	Surflan	12x1 qt.	
Fertilizer with 0.87% Team	Surflan	5x1 gal.	
Fertilizer with 0.92% Team	Surflan	2x2.5 gal.	
Fertilizer with 1.00% Team	Turflon II Amine	2x2.5 gal.	
Fertilizer with 1.15% Team	Turflon D*	2x2.5 gal.	
Fertilizer with 1.25% Team	Turflon Ester *	2x2.5 gal.	
Fertilizer with 1.50% Team	XL2G*	50 lb. bag	
Fertilizer with 1.54% Team			
Fertilizer with 0.92% Balan	Incont	iaidaa	
Fertilizer with 1.02% Balan	Insect	icides	
Fertilizer with 1.04% Balan		States and the second	St. Carton
Fertilizer with 1.15% Balan	Dursban Granular	0.50%	
Fertilizer with 1.28% Balan	Dursban Granular	0.97%	
Fertilizer with 0.46% Balan & 0.92% Dursban	Dursban Granular	1.00%	
Fertilizer with 0.86% Balan & 0.86% Surflan	Dursban Granular	1.16%	
Fertilizer with 0.57% Balan & 0.57% Surflan	Dursban Granular	1.20%	
Fertilizer with 0.38% Gallery	Dursban Granular	2.32%	
		O FOOL	

2x0.5 gal.

Cutlass 50W* Rubigan AS*

ANDERSONS AL TURF" PRODUCTS

Call for a complete product selection guide.

The Andersons welcomes inquiries regarding any of its turf care formulations including those incorporating DowElanco products. Call us toll-free and ask for a free copy of our product selection guide for TeeTime golf course products or for Andersons Professional Turf products.

Call Toll-Free I-800-225-ANDY

the professional's partner®



©1994. The Andersons. ®Dursban, Surflan, Team, Balan, Gallery, Cutlass, Rubigan, Treflan, Confront, Snapshot, Turflon II, Turflon D, Turflon Ester, XL2G, and Pageant are registered trademarks of DowElanco. CIRCLE #107

Fungicides 4x8 oz.

Pageant* * Limited quantities available

Dursban Granular

2.50% **Dursban Turf** 2x2.5 gal. **Dursban Turf** 4x1 gal. 55 gal. 6x2 lb. Dursban Turf Dursban 50 WSP 6x5 lb.

BRIEFS



UMASS OFFERS GREEN SCHOOL

AMHERST, Mass. - Green School, the University of Massachusetts' Comprehensive Extension System's educational training program for Green Industry professionals, will run



from Jan. 5 to March 24. The program is designed to

provide training in horticulture fundamentals and the relationship of those fundamentals to environmental quality. Intended to instill a sense of stewardshipthe school will teach integrated pest management.

JENKINS CENTRAL FLORIDA PRESIDENT

Brian M. Jenkins of Dubsdread Municipal Golf Course in Orlando has leaped from the secretary-treasurer position to president of the Central Florida Chapter of the Florida GCSA in the wake of resignations from President Chuck Blankenship and Vice President Donald W. McCommon of Ventura Golf and Country Club in Orlando.Blankenship also resigned his position at Ridgewood to pursue other interests in the industry.

CANADIAN CONCLAVE SET

OTTAWA, Ontario, Canada - The 46th Canadian Turfgrass Conference and Trade Show March 11-14 at the Ottawa Congress Centre will embrace the Canada Golf Superintendents Association's 28th annual meeting



March 13. Speakers and their topics include keynoter Alan Simmons, teamwork among

staff on golf courses; Dr. Joseph Vargas, integrated approaches to turfgrass disease control; Dr. Harry Niemczyk, integrated pest management, and John Gavett/Michael Kernaghan, effectively dealing with pesticide issues.

..... **BIODIVERSITY TREATY AGAIN DELAYED**

WASHINGTON, D.C. - Senate Majority Leader George Mitchell, D-Maine, has set aside a vote on ratification of the international Convention on Biological Diversity until the Senate reconvenes in January. Opponents say it potentially overrides U.S. sovereignty in regards to land use.

..... **ISS INKS PACT**

SEBASTIAN, Fla. - ISS Golf Services has signed an agreement with the city of Sebastian for the maintenance of its golf course here. By contracting the golf course maintenance, the City hopes to cut its losses and turn a profit. ISS now maintains 15 public, semi-private, and private golf courses. GOLF COURSE NEWS

USGA consults wildlife groups on research

By MARK LESLIE

WASHINGTON, D.C. - Citing a lack of research on the effects of golf course construction on wildlife, the U.S. Golf Association has set aside \$100,000 a year for the next three years to fill this void.

USGA officials will meet here with wildlife

agencies and associations the first week of November to discuss how to best spend the funds.

"We're rounding up the National Wildlife Federation, Environmental Defense Fund and others who have an interest in wildlife and scientists from the Department of Fish and Game and other agencies," said USGA Green Section National Director Jim Snow. "We'll get everyone in one room and ask what they think the priorities should be for spending the money. Once we have their opinions, we will get together and seek proposals from scientists whose field is wildlife rather than turf.

"We hope to be able to start funding sometime in 1995."

Continued on page 16

Green Section adding regional offices By MARK LESLIE

FAR HILLS, N.J. - The U.S. Golf Association Green Section, which opened its first sub-regional office this summer, intends to reconfigure existing regions and perhaps add others, to be more effective and cost-efficient.

The moves will place USGA agronomists closer to clients and cut costs. The Green Section has been "heavily subsidized by the USGA" since the Turf Advisory Service's (TAS) inception in 1951, according to National Director Jim Snow. "TAS is a service to golf and that's part of our charter. We can't charge clubs enough to pay for it."

Fourteen agronomists and regional directors staff TAS in seven national regional offices. The first change came Continued on page 16

Audubon Program's newest addition

.....

CHESTERTON, Ind. - The Audubon Cooperative Sanctuary System (ACSS), a joint effort program between the Audubon Society of New York State and the United States Golf Association, has announced that Sand Creek Country Club has joined the program.

According to Jean Mackay, staff ecologist for New York Audubon, "The open space of a golf course is utilized not only by golfers, but is a habitat for a variety of wildlife species. We welcome Sand Creek's commitment to the environment and to managing the golf course with wildlife in mind."

Through the program, Sand Creek will become involved in programs that enhance habitats for wildlife on the golf course and preserve natural resources for the benefit of the local community.



Sand Creek Country Club in Chesterton, Ind., has joined the list of golf courses that have joined the New York Audubon's Cooperative Sanctuary System. The 9th hole of Sand Creek's new nine that will open next spring looks toward a dense stand of mature woods and wetlands. It is one of the major areas that will benefit from the club's participation in the program to enhance wildlife.

Golf House Tennessee course tests multiple bent, Bermuda cultivars

FRANKLIN, Tenn.—The Tennessee Golf Foundation's dream of developing a unique turf research center is becoming reality, as grow-in of The Little Course at Aspen Grove continues apace.

The Little Course at Aspen Grove, a nine hole short course with an extensive variety of turfs, will surround Golf House Tennessee here, just minutes south of Nashville. Golf House Tennessee, a renovated ante-bellum structure built in 1842, has been designed as a state-of-theart junior golf learning center. It will also be one of the first facilities to house all of the state's major golf organizations under

one roof: The Tennessee Golf Association, Tennessee Section PGA, Women's and Junior Golf Associations, Golf Course Superintendents and Club Managers.

Golf course architect Bob Cupp, who donated his services, designed The Little Course at Aspen Grove, located on land adjacent to The Legends Club of Tennessee, a 36-hole layout designed by Cupp and Tom Kite.

The Little Course features holes ranging from 84 to 228 yards with 11 bunkers, two lakes, two double greens, an 18-hole putting course and practice tees for junior clinics Continued on page 16



The Little Course at Aspen's 17,000-square-foot Vince Gill Putting Course sports a dozen varieties of bentgrass, for observation purposes.

WHERE THEY'RE GOING New Tri-Mountain track hires Stephens

RIDGEFIELD, Wash. - David Stephens has been named head superintendent at Tri-Mountain Golf Course, which opened here

this summer (Golf Course News, Aug. '94). Stephens

joined Tri-Mountain from Orchard Hills Golf & Country Club in Wash-



Having attended Portland State University and Portland Community College, Stephens is a graduate of the Golf Construction Techniques and Management course offered by the Golf Course Superintendents Association of America. He lives in Camas.

Continued on page 19





Cleve Stone (top) is the patriarch of three generations of superintendents: sons Owen, Lowell and Harold (center row, from left); and grandsons David and Rick (bottom row, from left).

The Family Stone – dedicated to maintaining the best in golf

By HAL PHILLIPS

he story began as a classic might, perhaps the "Grapes of Wrath." It spun off into an agronomic version of "My Three Sons," and continues to please the golfing public through reruns of "All in the Family."

It's the story of the Stones, a threegeneration family of super-intendents who've cared for golf courses in California's San Joa-quin Valley for more than 50 years. Apparently, it's in the genes.

"It's not unusual to find a family with two or three generations of doctors," explained Owen Stone, superintendent at San Joaquin Country Club. "But it's a little more rare to find three generations of superintendents."

Here's the Stone family line-up:

• Cleve Stone is 89 and, officially, he's retired. He became the first superintendent at Kern River Golf Club near Bakersfield in the 1950s, before moving on to Fort Washington Country Club in Fresno. He retired in 1973. But some habits are hard to break — he still works for son Owen in the shop at San Joaquin CC.

• 68-year-old Owen Stone has been at San Joaquin since 1973. He worked at Stockdale Country Club in Bakersfield for 10 years before taking the head superintendent's job at Belmont Country Club in Fresno, where he trained at least three family members in the trade.

• Rick Stone is the oldest of Owen's two superintendent sons. In the late 1970s, he carried on the family tradition by serving as superintendent at Cleve's old haunt, Fort Washington CC. He recently accepted the head superinten-dent's job at Rio Bravo Country Club in Bakersfield.

• Rick's younger brother David Stone worked for his father at San Joaquin CC until 1979, when he accepted the head superintendent's position at King's River (Calif.) Country Club. He's been there ever since.

• In the 1950s, Lowell Stone was discharged from the Navy and went to work for brother Owen at Belmont CC. After learning the finer points of his trade, he accepted the head superintendent's position at Sunnyside Country Club in Fresno. After moving to Stockdale and staying for more than a decade, the 56-year-old Lowell recently took the top job at nearby Madeira Municipal Golf Course.

• Not to be outdone, Billy Stone — Lowell's son, Rick and David's cousin, and Owen's nephew — also pursued a career in golf course management. After working for a full complement of relatives, he's now the head superintendent in his own right, at Valley Road Golf Club in Wasco.

• Though he caddied for many years, Harold Stone didn't get into agronomy until 1963 when he went to work for brother Owen at Belmont CC. He left for the head superintendent's job at Visalia Country Club and eventually became head super at Sundale Country Club — the private incarnation of Kern City GC, where his father had toiled 40 years earlier.

The 62-year-old Harold joined his father in retirement and has since returned to where the Stone story begins, Blackwell, Okla.

Stone family legacy continues in 3rd generation

Continued from previous page

"It goes way back," Owen explained. "We had a lot of relatives who came out here to California during the Depression and worked at Stockdale Country Club in Bakersfield."

Lowell chimed in: "I really started with an uncle of mine, Odell Harvey, who came out here during the Depression and worked at Stockdale. I believe that was 1938. The rest of us came afterward."

There you have it: Okies moving to California during the Depression; three sons of Cleve; three more from Lowell and Owen; and all employed in the family field.

All of the Stone superintendents worked for Cleve or Owen at one time or another. And now Cleve works for his son Owen, who has assumed the role of elder statesman.

"They're competing against me all the time," Owen said of his younger brother, two sons and nephew. "But they're young and everybody's got to do their own thing. It's getting harder to keep up with them every year."

So, who has the best greens?

"Me," Owen said flatly. "My greens out here are fast. I've always been

known for fast greens. My son called me once and asked how I got them so quick. I told him I didn't know. When I die, these secrets are going to die with me

"I've always told them, 'Take care of your greens.' They're your bread and butter. If you've got good greens, nobody's going to holler about a bad spot in the fairway."

In truth, intergenerational rivalry has given way to a healthy exchange of ideas. "Anytime anyone puts up a red flag, we

get together and hash things out," said Lowell. "I think the brothers share more information. Owen's two sons probably talk things over on the phone. Now that I'm in Madeira, Owen and I spend quite a bit of time talking on the phone."

approach yields better playing conditions. He picks things up from his sons and brothers, and vice versa.

"You've got to keep trying things, learning new ways to handle a pro-blem," said Owen. "I just put out an owl house because someone told me the owls will feed on gophers at night. Will it work? I don't know. We'll find out.

"We all work together. And five sets of eyes are better than one."



What is the perception of the golf course superintendent within the golf course industry? Architect Rees Jones likes to have a superintendent on the development team as early as possible. Gary Schaal, president of the PGA of America, said the superintendent is the most important person to an operation's bottom line in both income and expense.

These comments, by two high-profile people within the industry, can carry a lot of weight. To address these issues, the Palmetto Golf Course Superintendents Association - which covers the Grand Strand area of South

Carolina - has held two media days, featuring golf, a luncheon and a panel discussion with industry leaders.

This year, the panel consisted of Joe Baidy, president of GCSAA; Billy Fuller, consulting agronomist with Cupp Design and formerl superintendent of Augusta National; and Schaal.

The Palmetto association plans to continue with these Media Days to enhance the professional image of superintendents and improve the public perception of golf courses as an ecologically sound environment.







CIRCLE #111

Tenn. Hall course tackles research

Continued from page 13

and camps. The course, which will open in the spring of 1995, will be a public facility.

The Little Course will allow superintendents and turf researchers to study and test a wide variety of turfs under actual playing conditions in the transition zone.

Nicknamed "the quilt hole," No. 8 fairway has been planted with 12 varieties of Bermudagrass. A number of the plots are different

shades of green, hence the moniker. Zoysiagrass has been planted on the other eight fairways, with 10 varieties used in all. Seven of the zoysias were vegetatively planted and three were seeded.

The roughs will be planted with fescue/bluegrass blends.

On the greens, 12 varieties of bentgrass will be planted and many of the newly released varieties are included in these tests along with many next generation varieties. The bentgrasses will be planted on their own greens in monostands. The unreleased bentgrasses will be planted in 1,000-square-foot plots on the putting green for evaluation. Having the newer grasses on these greens will give superintendents the opportunity to evaluate for wear tolerance, color, texture, density, disease proneness, water and nutrition needs, recuperative potential, etc.

Two other projects not visible to the eye will be ongoing. The first is an air-movement system which will be capable of blowing air through the soil temperature to increase serration, and potentially lower the soil temperature through a cooling system being installed. The system may also be reversed to such air through the soil profile and remove excess water, thus replacing the water with air in the soil and keeping the soil from becoming water-logged. This system is entirely housed underground.

The second project involves a subsurface liquid injection system. Initially, it will be used to subsurface irrigate the green. After testing, it may be used for injection of fertilizers.

Individuals and companies have generously offered support, including the donation of a Toro

As you know, some greens are more challenging than others.

irrigation system and a nine passenger Club Car golf cart. The 17,000 square-foot putting course has been named the "Vince Gill Putting Course" in honor of the country music superstar who donates proceeds from his annual pro-celebrity golf tournament, which has totaled more than \$200,000 in two years.

Joe Kennedy, director of golf maintenance for The Legends Club, will also serve as superintendent of The Little Course.

He will monitor and direct all turfgrass studies and research, while maintaining the course.

USGA funding wildlife research

Continued from page 13

Snow said it is "pretty clear we need to take some projects, like new golf course facilities before construction in a wooded area or former farmland — and do a wildlife survey before, during and after construction and follow that for three years or more."

Nobody has done this, with the idea of discovering what happens to plant and wildlife populations, he said. "So we need to be able to show — five years or 10 years after construction that wildlife populations are greater or less than they were, and under what conditions that occurred," he added.

Although he expects most of the studies will be done by universities, Snow said some federal agencies may also get involved.

Green Section dividing regions

Continued from page 13

this summer in the Mid-Atlantic Region, which opened a second office in Covington, Ky. Bob Brame was placed in charge of the new sub-region covering Kentucky and Ohio. Director Stanley Zontek and agronomist Keith Happ remain in West Chester, Pa., to handle clients in Pennsylvania, Maryland, Delaware, Virginia and West Virginia.

Snow said the Green Section will establish an office in St. Louis to lessen the demand on the Mid-Continent Region, which stretches from Louisiana to part of Wyoming including Texas, Oklahoma, Nebraska, Missouri, Colorado, New Mexico and Kansas.

Paul Vermeulen, an agronomist in the Western Region based in Lake Forest, Calif., will manage the St. Louis office. "The question is if that office will be in the Great Lakes or Mid-Continent region," Snow said. "We will search for a replacement for Paul out West."

The idea of additional offices and realignment of regions, he said, "is to make the service available to as many clubs as we can."

© 1994 The Toro Company. The Toro Company, 8111 Lyndale Avenue South, Minneapolis, Minnesota 55420. "Toro", "Greensmaster" and "Turf Guardian" are registered trademarks of The Toro Company.



Make sure contractors have workers' comp, liability certificates

By TERRY BUCHEN

r e have a standard operation procedure that all sub-contractors must submit, in writing, original or photo copies of 1. Workers' **Compensation Insurance** Certificates and 2. Liability Insurance Certificates any time they submit competitive bids. This helps "weed out" potential problems that could occur once the contract is awarded. In today's litigious society we

must protect ourselves and our employers from even the remote possibility of lawsuits.

One example was when a tree service came onto a golf course's property and an employee was injured while performing his duties. His employer did not have Workers' Compensation Insurance, so he sued the golf course for all his medical bills, plus further damages.

Another time, a sub-contrac-

tor did extensive damage to a golf course it was working on. The sub-contractor had no liability insurance. The golf course had to "back charge" the contractor and deduct it from his next invoice, then had to find another contractor who had both insurance prerequisites.

Another interesting recommended procedure, that varies from state to state, is a Mechanics Lien Law that in essence states that a general con-



One example is when a general contractor is building a golf course and all his subcontractors must submit mechanics liens to prove that every supply brought onto the property has been paid for.

THE BUDGET SEASON

Most superintendents are preparing their maintenance budgets for the coming fiscal/ calendar year. The hardest thing, it seems, is to justify existing or proposed staffing to club officials.

One document I use successfully is the labor flow chart. I make a chart with one column for each of the 52 weeks across the top and each duty/task performed listed separately down the left column. Then I simply add labor hours to each column in each category.

A local printer enlarges the chart to a size that will fit on an artist's easel, so it can be seen during a meeting with my employers. It is a lot of work but it pays off. It truly helps course officials see that you really need X number of employees if they can see where all the labor hours are being used, and why!

Taking this idea one step further, I have made 35 mm slides of labor flow charts, past and present, and shown them at the same meetings. I usually use two slide projectors simultaneously to better show the difference.

I also have used two slide projectors to show before and after projects such as building a new tee, new green, etc. during capital budget meetings. It proves effective in showing progress to club officials, since it is much more thorough and appreciated by all.

GREEN COMMITTEE MEETINGS

One successful tack many superintendents have used over the years is to have green committee meetings, at least once a year, at the maintenance building complex. This is a good way to sell an idea, such as maintenance building remodeling, or to show the condition of maintenance that should be replaced. It also puts the committee in a better position to think "your way."

This works well for all types of golf course operations, such as with owners, managers, municipal directors, military base commanders, etc. that are the superintendent's employers.





14th green, The Coeur d'Alene Resort Golf Course, Coeur d'Alene, Idaha



You gladly accept that challenge. And Toro offers complete families of riding and walk greens mowers to help you succeed.

Like our new Greensmaster® 3100. With fully floating reels and new 3 wheel drive. The softest footprint of all. A quieter engine. And Turf Guardian® leak detector.

No wonder more riding greens mowers bear the name Toro than any other. Because

ours are products of Toro's

partnership with

golf course

superintendents

Greensmaster® 500 for more than floating cutting

75 years. To

Greensmaster® 1000 is a proven walk mower easy to operate and uniquely weighted for greater turf penetration.

design exactly what you

need to create beauty and playability of

features a free

undulations.

unit to surmount

tournament calibre.

We like challenges, too.



Helping You Put Quality Into Play."

For more details, contact your Toro Distributor. 1-800-803-8676, ext. 152

CIRCLE #113

revolutionary.

But as we

near sup-

posed per-

fection, true

improvements

are more

difficult to

achieve, or

Golf agronomists today are under the gun

Standards for perfect turf constantly raised

Belief of itself never established a fact, nor can it refute one. Investigation alone brings out the proof. It is the facts in greenkeeping that count, not the opinions.'

— The Bulletin of the USGA Green Section, April 1926

By JAMES LATHAM

It is incongruous that, despite the number of ongoing turfgrass research programs in this country, we are faced with a seemingly increasing number of major problems in golf course maintenance.

Superintendents are better educated, scholastically, than ever and have almost unlimited opportunities for continuing education. Golf course are being served by more competent sources of information than ever — in the form of publications, consultants, computer networks and very knowledgeable suppliers.

But the golfers are restless. Superintendents are edgy. Agronomists are frustrated. Does this mean that the scientific approach to turf culture is failing to provide for the needs and desires of golfers, or have we reached the agronomic limits of what can be accomplished?

The answer may lie in reassessing the demand for and supply of information needed to fulfill the goals of maintenance operations.

The challenges today are much different than those faced three or four generations ago, when scientific investigation began to encroach into the art of greenkeeping. Then, disease, insect and weed controls were of primary importance in the perfection of golf turf.

As these problems were eased, the agronomic side of golf turf production came to the fore and has remained there since, especially when comparing the B.S. age with the A.S. age (Before Stimpmeter and After Stimpmeter.)

In the B.S. age, 3/16-inch was considered to be close mowing, but was not universally practiced

James Latham is retiring at the end of the year after 40 years in the turfgrass field. A Texan who holds bachelor's and master's degrees from Texas A&M University, he has been director of the Great Lakes Region of the U.S. Golf Association Green Sec tion since late 1984. He has been a Green Section agronomist for many years and was on the agronomic and Milorganite marketing staff of Milwaukee Metropolitan Sewerage District. He received the Distinguished Service Awards from the O.J. Noer Research Foundation and Wisconsin Golf Course Superintendents Association, and holds honorary memberships in several golf course superintendents Associations.

— mostly for competitions. To provide playing surfaces capable of withstanding today's heavy play and tournament-like heights of cut, a number of changes were required, namely new cultivars, new growing media, new procedures and new equipment. None of these were

Breakthroughs, but the results of basic scientific research and careful field observations. Changes have been evolutionary, rather than Iames Latham

the paramaters of perfection are being raised. It is still an effort to produce and maintain "U.S. Open Conditions" for a week, and some golfers demand them all season. Did anyone ever consider why the Open is held in mid-to-late June? Why not early August? Perhaps some-one con-sidered the weather.

Did Toronto bentgrass really fail strictly because of a bacterial disease? The collars didn't die. Are all these "new" diseases really new, or are the highly defoliated grass plants simply incapable of resisting infestation by micro-organisms previously



considered too weak to be of concern?

Why aren't bentgrasses more shade-tolerant? Beautiful but pocketed green locations were cited as problem areas in the 1920s, so why should they be less of a problem today; with additional stress from excess defoliation and more golfers? Maybe grass breeders need more emphasis on shade tolerance and other physi-**Continued on next page**



Buckeye, through and through." are only 45 holes to look after. ...

> CONYERS, Ga. - Scott Dornbrock has left his post as golf course superintendent at Atlanta Athletic Club's Riverside Course for a similar position

> here at Legacy Golf Club, which remains under construction.

Randy Mangum has replace Dornbrock as head super at the Riverside Course.

... OKEECHOBEE, Fla. - Fred Flora has been named greens superintendent at Blue Heron Golf and Country Club, a threeyear-old development here. Only

nine of the proposed 27 holes are open for play. Flora, who came to Blue Heron from Placid Lakes Country Club where he worked under Bob Harbough, will oversee construction of the remaining 18 holes.

...

REYNOLDS, Ga. - Barry Bell is the new superintendent at Reynolds Golf Club here. Bell had been the assistant at Brickyard Plantation.

COFFEEVILLE, Kan. Randy Sweet is the new superintendent at Hill Crest Golf Club for the city of Coffeeville.

...

Under fire

Continued from previous page

ological problems of green and fairway cultivars rather than simply adding another look-alike to the long list of available "brands."

Incidentally, who can keep track of the many bentgrasses, bluegrasses, perennial ryegrasses, bermudas, etc., entered in the National Turf Evaluation Program tests?

It may, however, be easier to develop a new grass for greens and tees than to convince a bunch of tree huggers that as long as golf is played on grass, it should have priority over other species.

The growing medium for greens has been a subject for disagreement or, at least, discussion by superintendents and agronomists for many years.

While the current Green Section procedure doesn't ensure total success, just think of trying to sustain total turf cover under intense play on push-up greens mowed according to today's standards.

Remember that those greens depended on surface runoff for most of the drainage and that close mowing significantly limits legitimate hole placement. We can thank high-sand top dressing and all types of aeration for the survival of most of these older greens.

and in more detail. Special investigations are needed regarding plant reactions to environmental stresses other than

on the soil conditions - even in sands - which affect the oxygen supply required for strong root

management, along with the allied sciences, remain the basic tools necessary for keeping us on track with current demands. The research work today must be more finely honed than ever, and that will take more time. And money.

While all of us in the field have theories, beliefs or feelings, hard data still provides the most reliable information. It helps us to overcome the many differences between the supply of super turf and the demands of super golfers.

Golf's Driving Force.

Supers on the move Continued from page 13

DODGE CITY, Kan. - There's a new sheriff in town... Shawn Ackerman is the new golf course superintendent at Dodge City's Mariah Hills Golf Course.

ALPHARETTA, Ga. - Mark Dinan is the new golf course superintendent at Crook Creek Golf Course in Alpharetta. Dinan comes to Crook Creek from Council Fire Golf Club in Chattanooga, Tenn., where he served as an assistant.

Our all-new, all-powerful

PowerDrive[™] System 48

makes the Club Car DS Electric

the most technologically

advanced golf car on the

planet. The fact that it climbs

like a rocket, however,

is not at all coincidental.

HERSHEY, Pa.

Ron _ Diefenthaler is the new course superintendent at Hershev Country Club here. When American Golf Corp. (AGC) bought the course - about two weeks before the Lady Keystone Open, held each year at Hershey - the management company summoned Diefenthaler from his prior post in Toledo, Ohio.

"I've never turned down a challenge," said Diefenthaler, a Big 10 man who isn't intimidated by his new home in Nittany Lion country. "I have a bachelor's degree from Ohio State. I'm a

Club Car R&D engineers

don't have much time for R&R.

So they designed a powerful

48-volt electric golf car that

lets them play a round PDQ.

has the power to climb hills

faster all day long.

WELLINGTON, Fla. - Scott Mau has been named golf course



Scott Mau

Polo and Country Club here. The 36-yearold Mau had been responsible for the 54 holes at Port Royal

on Hilton Head. The Ohio State University graduate can relax now-at Palm Beach Polo, there

But power and speed aren't enough. So our engineers developed an ingenious onboard computer that "talks" to the charger for an optimum charge every time, and lower operating costs every day.



PowerDrive System 48 is designed to go where no electric limited battery warranty. But do vour own research. Call 1-800-643-1010 and

Proof That Rocket **Scientists** Play Golf.



November 1994 19

We still need more information,

those now under study.

We must have more information growth.

The agronomics of golf turf

Pa. tandem at core of aeration clean-up

Ch 1 Mc Green

By MARK LESLIE AWLEY, Pa. - Nightmare at Woodloch Springs, Act III. That is what Mark Eisele and Mike DeSanti were trying to avoid when — after two years of horrors in aerating the new resort country club here they made an innovation that could save thousands of superintendents major cleanup headaches.

CARTS The Best Flags,

Signs, Flagsticks,

Tee Markers,

Markers,

And

Practice Green

Accessories

Ever Made.

Call today for a catalog and more information.

DISTINCTIVE GOLE COURSE ACCESSORIES

16761 Burke Lane, Huntington Beach, CA 92647

Phone 714 842-8494 / 800 843-0809

Chief mechanic DeSanti, head superintendent Eisele and crew foreman Joe McConnell modified an R&R Brush Reel unit this fall and successfully used it to harvest plugs after aerating their 20-1/2 acres of fairways. The brush reel is manufactured to fit a Toro GM3 triplex mower and meant to clean up topdressed greens. But the Woodloch Springs Country

Club trio took R&R's "ingenious" idea and turned it to an even greater good.

"After playing with the height and bedknife spacing, we've been able to neatly clean the fairways. On the scale of one to 10, it's a solid eight,' DeSanti said. "It has ended a nightmare that always haunted us for months and months. Every week was one week closer to aerifying season and dealing with plug removal and untold hardships."

What we shall call the Woodloch Springs Modification was such a godsend, the men wanted to share it with colleagues. "Everyone who wants to remove plugs deals with this," DeSanti said.

"I imagine any courses in the Northeast — unless they have topsoil on their fairways - are dealing with the kind of fairways we have - hard pan and rocks," Eisele said. "No matter what technique they use for pulling plugs, and no matter what kind of soil they have, this method will work."

A key problem for Woodloch Springs, Eisele said, "was how to remove the plugs - the rocks, dirt and clay - so that we could mow without destroying real expensive, very hardto-maintain, precision mowers. You're talking, literally, tons of plugs. The mower blades still get beat up [with the new method], but not as bad as before. Plus, before, we'd blow the plugs out into the rough where they'd stay until they deteriorated.



Mark Eisele, left, and Mike DeSanti are thrilled with the core clean-up of their new technique.

another problem. It is an expensive process, and

"prone to diseases when it's tortured and that is a torturous process, especially when cutting with a dull blade. It's getting wounded rather than a nice clean cut."

hardly tell. It's phenomenally faster," Eisele said.

Saying they tried sweepers and vacuums to no avail the first two years after opening the course in 1992, Eisele and DeSanti said the new method has many positives, among them turfgrass recovery and playability.

"When you have bone-dry conditions and bone-dry plugs, it is immaculate," DeSanti said. "We found a big difference in playability."





MCCONNELL REFINEMENTS

Once the R&R reels arrived, the duty fell to McConnell to refine the plug-removal process. For bentgrass fairways cut at one-half inch: · Adjust the bedknife so that

aerify as many as three holes a

day and it is faster than the

normal process - with a blower — even though they

make two passes with the

brushes.

it just skims the brush. · Adjust the rear roller for

maximum height. • Set the cutting height to .400 inch by adjusting the front

roller. Drop the bedknife away from the brush until the height is .300 inch by adjusting the

bedknife bolts. • Install the unit on the

machine. "To this day, those were the last adjustments made and are

now the parameters for the process," DeSanti said.

This adjustment gives the bedknife a scooping angle, so that, with the reel spinning at high speed above it, the plugs are flipped into the bucket. "Then you just empty the bucket," Eisele said.

The unique thing about the GM3 is that there are three rollers on each cutting unit," DeSanti said. "The two on the unit itself adjust the height of cut for the mower. The sole purpose of the large third roller, on the front, is to carry

Tour of Duty

DAVID BERGSTROM PGA West/Nicklaus **Resort Course** La Quinta, Calif. **Diners Club Matches** Dec. 8-11, ESPN/ABC

David Bergstrom has been a fixture at PGA West for the past seven years. The 29-year-old did an internship on the Stadium Course in 1987 while working on his two-year turf degree at Michigan State University. With diploma in hand, he returned in the spring of 1988 as a maintenance foreman on the same layout.

Over the next few years, he assistant advanced to superintendent and then head superintendent of the Palmer Course, superintendent of the Private Nicklaus Course, and as of April to head superintendent of both the Nicklaus Resort and Stadium layouts. "I've worked at all four PGA West courses now," Bergstrom said. "Each one is unique. It doesn't seem like I've been in the same place for seven years."

THINGS TO LOOK FOR: The Nicklaus Resort layout has the golfer-turned-architect's characteristic plateaued fairways, according to Bergstrom.

The tournament pits twoperson teams from the LPGA, PGA and Senior PGA Tours against each another. "It will be interesting to see how the tees are set up for the players on each of the tours," Bergstrom said.

MADE-FOR-TV PRE-PARATIONS: "There's really not much we've had to do except move a couple of trees that would have been in the way of the television cameras," the head superintendent said. The course has hosted other televised events, so things like the best tower and trailer locations have already been determined.

The course closed from Oct. 12-28 for routine maintenance. "Well scalp everything right down and then overseed it," Bergstrom said.

Core clean-up

Continued from previous page the bucket. So you can have a tremendous amount of weight in the bucket and it won't affect the flotation of the unit. There is no scalping."

They recommended that the operator wear a mask because of heavy dust, and added that the machine needs a new air filter daily as well as frequent oil changes.

... Eisele feels the process will allow him to improve his subsoil.

"Eventually, we want to start top dressing the fairways to get a better layer of topsoil." GOLF COURSE NEWS

STEVE SORRELL **Colleton River Plantation** Hilton Head Island, S.C. Wendy's Three Tour Challenge Dec. 24-25, ESPN/ABC

Steve Sorrell, 34, was a struggling golfer on the Florida mini-tour when he chanced to Tom Alex, head meet superintendent at Grand Cypress Resort in Orlando. "I'd considered becoming a superintendent," Sorrell said. "But I got serious about it after seeing what Tom was doing. He was an

inspiration." Sorrell put away his clubs and worked on the Grand Cypress grounds crew for a year. He enrolled at Penn State. received a two-year turf management degree and returned to Orlando, where he eventually became Alex's assistant. Nearby MetroWest Country Club handed him the head superintendent's reins in 1989. A year and a half ago, Colleton River made him head superintendent of the coastal South Carolina course.

THINGS TO LOOK FOR: The one-day tournament was filmed in early October and will be replayed on television over

Christmas. The Bermudagrass fairways were overseeded with rye and the greens with poa trivialis three weeks before the event. "They should stripe better," Sorrell said. "But it's a challenge to get it ready in time for the tournament. If we can maintain 60 to 70 percent of the overseeded grass, we'll be doing well." Colleton River is considered one of Jack Nicklaus' most playable layouts, with small but fairly flat greens nestled between flowing sand dunes. "It's one of the prettiest courses

MADE-FOR-TV

PARATIONS: The one-day, 18hole tournament features threeplayer teams from the PGA, Senior PGA and LPGA tours in a sort of battle of the sexes and generations. The players change clothes after nine holes so that when the event is televised on Dec. 24 and 25, it looks like they took a day off in between. Sorrell spreads a little extra fertilizer a few weeks before the event to green things up for the cameras. Crews removed 150 trees this summer and have been busily cleaning up unsold house lots surrounding the course to help residential sales.

THIS FALL THINK SPRING!

- Beneficial in applications after aerification or prior to seeding and sodding to promote turf growth and recovery
- An 85% slow-release natural and organic fertilizer which promotes excellent color and density without excessive growth
- A microorganism enhanced fertilizer that assists in disease management
- An excellent dormant feed fertilizer that provides a deep green spring color

THE NATURAL

CHOICE FOR YEAR~ROUND TURF MANAGEMENT



CIRCLE #117

A DIVISION OF GRIFFIN INDUSTRIES, INC. COLD SPRING, KY 41076

FOR A DISTRIBUTOR NEAR YOU CALL (800)252-4727



Also available in

10-2-8, 10-3-3, and 7-1-14

ature



I've ever seen," Sorrell said. PRE-

Allied associations: Strong public sector crucial to golf industry

Continued from page 1

track in Maintenance and the National Golf Foundation is co-sponsoring the education sessions on Development, while Golf Course News is conducting the Management & Marketing conference.

The Golf Course Builders Association of America (GCBAA), American Society of Golf Course Architects (ASGCA) and National Golf Course Owners Association are also participating in the trade show.

"Since the majority of golfers and golf courses are public facilities, it's important to try to reach as many of them as we can," said USGA Green Section National Director Jim Snow. "We visit a significant number of new public courses throughout the country. But we want to reach out to even more of them, to put information in their hands pertaining to facets of our program that can benefit them and the game."

"Currently, the growth is [in public golf] and, from what we can see, it will be there for the next decade," said ASGCA Executive Director Paul Fullmer. " 'Public' has a broader definition now because you have so many different types of ownership — from municipalities and other government bodies to strategic alliances between developers and property owners. It's not as simple as it used to be. I think you need a forum such as this [Golf Course Expo] for people to learn the best ways to do things, so that everybody doesn't have to spend a fortune to reinvent the wheel..."

"As it relates to our mission — to foster the growth and vitality of the game, we see public golf as the most important component to growing and fostering the growth of the game," said NGF Vice President Richard Norton. "The more access the general public has to golf, the more the game will grow. And that's what we're all about."



Pointing to the recent success of public golf facilities, GCBAA Executive Vice President Phil Arnold said owners and managers of existing facilities are especially good candidates as future clients.

"I think it is a trend that people running public courses, and doing them fairly successfully, are building additional courses. And we want them to know about the GCBAA and our certification program...

"The renovation and remodeling business is going to be a very good source of work for golf course builders in the next 10 years — just by virtue of how the stakes have risen. People are demanding a little bit more from their local golf course. They want a little bit better this, and a little bit better that, and they want to redo this, or put in irrigation or drainage systems..."

THE MAINTENANCE ANGLE

Regarding the Green Section's Turf Advisory Service, Snow said: "Most public courses are on a tight budget and don't want to spend the money. In general, they hesitate to pay consultants when they think they can get by themselves. They have hired a superintendent, so they think they need no more help.

"But, if we can identify areas where they are wasting money or spending more than they need to, or spending it in a way that is not as productive as they could, we can save them many thousands of dollars in many cases."

Snow recalled a visit to a nine-hole course in Maine years ago, when the cost of his consultation was \$500. "The course had a \$57,000 budget and \$20,000 was fertilizer," he said. "I saved them about \$15,000 a year just on fertilizer. All that for one measly \$500 visit."

OF DESIGN AND CONSTRUCTION

"In the '80s golf was heavily real estatedriven. But now it's economically driven, which is good," Norton said. "And most of the growth has been fueled by daily-fee development."

More developers and financial organizations are discovering golf is a moneymaker, "but it's not a slam-dunk," Norton said. "It's in the industry's best interest to educate these people so they don't make mistakes. They need to know how to position a product and make sure the investment side matches the income potential."

"There's no doubt the public sector is the most important sector in golf," Fullmer added, "and that's not just because it is around 80 percent of the new course business. More importantly, it demonstrates that golf is truly a game for everyone and not an elitist sport."

.....

CANADIANS OK EXPO CREDITS

WESTON, Ontario, Canada - The Canadian Golf Superintendents Association (CGSA) has approved certification points for people attending the education sessions at Golf Course Expo, according to CGSA Executive Director R. Vince Gillis. The CGCS board voted in September to extend the points to members working toward master superintendent status, Gillis said. Canadians must be superintendents for five years before they can begin work toward the master designation. The Golf Course Superintendents Association of America had earlier approved continuing education units (CEUs) for Golf Course Expo.

GOLF COURSE NEWS



ORANGE COUNTY CONVENTION GENTER Orlando, Florida November 11-12, 1994

A NATIONAL EXHIBITION AND CONFERENCE FOR OWNERS, Superintendents, Managers, And Developers Of Public-access Golf Facilities







INSIDE...

General Information
Key Note and Opening Sessions
Shop Talks
Conference at-a-glance
Conference Program and Locations
Exhibitor Index
Exhibitors at-a-glance
Floor Map
Product/Service Index

EXIDO Directory

Showinne!



Golf Course Expo General Information

SHOW HOURS: Friday November 11 10:00 a.m. to 5:00 p.m.

Saturday November 12 10:00 a.m. to 5:00 p.m.

ROOM ASSIGMENTS: Keynote Session: Conference Room 8

Conference Sessions: Friday, Nov. 11 & Saturday, Nov. 12 1:00 to 5:00 p.m. Conference Room 6A, 6B, & 7 Management Track—Room 6A Maintenance Track-Room 6B Development Track-Room 7

Speaker Ready Room: Conference Room 9A

Conference Registration:

Show Office:

Show Office B & C, Registration Concourse /Grand Lobby Area Wednesday November 9 12:00 noon to 5:00 p.m. Thursday November 10 8:00 a.m. to 5:00 p.m. Friday November 11 8:00 a.m. to 5:00 p.m Saturday November 12 8:00 a.m. to 5:00 p.m

Press Office: Conference Room 9B Friday November 11 8:30 a.m. to 5:00 p.m Saturday November 12 8:30 a.m. to 5:00 p.m.

Information/Message Center/ Lost and Found: Registration, Hall B

DINING

FACILITIES: A cafe is located on the show floor, to the far right of the entrance. Concessions will also be provided in the courtyard area in the Grand Lobby



EMERGENCY

PROCEDURE:

showcasing new products or services at Golf Course Expo. New product descriptions are available at the entrance to the exhibit hall.

Pick up any house phone and dial

1119. House phones are located on

the show floor and throughout the

Mark Your Calendar For Next Year!



A NATIONAL EXHIBITION AND CONFERENCE FOR OWNERS, SUPERINTENDENTS, MANAGERS, AND DEVELOPERS OF **PUBLIC-ACCESS GOLF FACILITIES**



Golf Course Expo 38 Lafayette St. P.O. Box 997 Yarmouth, ME 04096 tel: 207-846-0600 fax: 207-846-0657

Data-Base Editor Catherine Finn **Conference Group Manager** Rebecca Quinlan **Operations Manager** Christine Carlson **Exhibit Sales Manager** Michael Lafaso **Conference** Assistant Sue Foden Support Ann Archambault Linda Draper Art Credits Misty Pilz/GraphiX Group, Inc. United Publications, Inc. Publishers of specialized business and consumer magazines Chairman Theodore Gordon President J.G. Taliaferro, Jr.



Publisher Charles von Brecht Editor Hal Phillips Managing Editor Mark Leslie Associate Editor Peter Blais National Golf Foundation Liaison Holt Hackney GOLF COURSE NEWS



Everything you wanted in a greens mower.



The Ransomes Greensplex[™] 160

We had to draw the line at the kitchen sink. But, other than that, the Greensplex™ 160 has everything you asked for in a greens mower: a combination of quality of cut and quality performance. The Greensplex 160 hydrostatic drive assures accurate ground speed on slopes. Standard power steering delivers steady control and incredible maneuverability. Fingertip controls provide maximum comfort and easy operation.



We didn't throw in the kitchen sink, but we are throwing in a free video on the Greensplex. Send for it today by calling 1-800-228-4444.



In addition, it is easy to service with features such as

Available in both gas and diesel.

FAX (402) 474-8522.

interchangeable cutting heads and on-board backlapping.

You no longer have to choose between quality of cut and

quality of performance in a greens mower. The Ransomes

Greensplex 160 offers the highest standards of both.

For a free demonstration call 1-800-228-4444. We'll

4304 Ransomes America Corporation, 900 North 21st Street, P.O. Box 82409, Lincoln, NE 68501-2409 © Ransomes America Corporation 1994. All rights reserved.





Celebrated Speakers — Open to All Expo Attendees



Friday, November 11 9:00 a.m., Room 8

The summer of 1960 is remembered as Arnold Palmer's golden summer, as the superintendent's son claimed the U.S. Open, Masters and no less than six PGA Tour events.

Palmer's meteoric career in many ways parallels the growth of the public course. In fact, Palmer's exploits that year are generally credited with lighting a fire under millions of Americans who took up the game of golf in the early 1960s. In 1960, there were 3,149 public-access golf courses: daily-fee, municipal and resort. By 1965 that figure had risen to 4,436—an extraordinary jump of 1287 courses, or 250 openings a locure of the norm.

year. This in an era when 150 total course openings had been the norm.

Arnold Palmer is not only one of golf's all-time great competitors, but he is the single greatest force behind the development of public-access golf. Over the years, as the wins continued to pile up, Palmer consolidated his influential place in the game by forming Palmer Course Design Co. and Palmer Golf Management, both of which specialize in creating and operating public-access golf courses.

Congurrent Conference Sessions: Friday, November 11



Saturday, November 12 9:00 a.m., Room 8

Robert Trent Jones, Founder and President of Robert Trent Jones II International, needs no introduction. Famous worldwide, Jones is a globe-trotting golf course designer who, like his father, can say the sun never sets on his golf designs. From North and South America to Asia, Europe—even the former USSR—Jones has left his remarkable imprint on the world of golf with more than 150 course designs.

The president of Robert Trent Jones II International numbers many heads of state among his friends and acquaintances, and has been

deeply involved in the ongoing debate in California with environmental activists. He recently completed University Ridge at the University of Wisconsin in Madison. Among his more famous public-access golf courses are Heron Lakes Golf Course, a municipal course in Portland, Oregon; Spanish Bay in California; and The Prince in Hawaii. He is a past president of the American Society of Golf Course Architects and authored the book *Golf by Design*, released earlier this year.

Golf Course Expo Conference Topics & Room Assignments — Open to Conference Registrants

issue tickets! Identify the sources and causes of traffic-related turf problems and methods to solve them. From the point of view of two very high-traffic facilities, review tried and true methods as well as new products and solutions.

- Address slow play and consequences of not addressing traffic problems
- Design, construction and approaches to mitigate the impact of cart traffic, steel spikes, and disabled golfers
 Importance of good housekeeping and image
- How to address environmental responsibilities unique to busy public-access courses including biological pest control Setting realistic expectations and communication are key

Speaker: Joel Jackson, Golf Course Superintendent, Disney's Magnolia Golf Course, Orlando, FL and Donald Tolson, CGCS, Golf Course Superintendent, Fox Hollow at Lakewood, Lakewood, CO

3:00 p.m.

WATER, ENERGY AND WILDLIFE CONSERVATION MEASURES ON THE GOLF COURSE

Today's turf manager is charged with protecting and conserving our valuable natural resources. During this session, you'll examine the latest practices in irrigation, pest control, wildlife management, and conservation.

- Programs to enhance wildlife
 Techniques to establish buffer zones for improved aquascapes
- Irrigation conservation measures

You'll get new approaches to maximize your operating efficiency and conserve our precious natural resources in the process

Speaker: Chuck Gast, Agronomist, USGA Green Section, Florida Region



Management & Marketing Track 1:00 p.m., Room 6A

CREATIVE GOLF MARKETING: HOW TO BOOST YOUR BOTTOM LINE WITHOUT SPENDING A FORTUNE

Innovative techniques to improve immediate and long-range profitability. Loads of fresh ideas using marketing, advertising, media, and community relations.

- · How to attract national and international visitors
- Ways to get effective news publicity and community support
- Tips for creating money-making brochures and money-saving ads
- Beat the competition with photography and video
 How to harpest the drawing power of local hotels to he

 How to harness the drawing power of local hotels to help you You'll generate at least one new and inexpensive marketing idea that you can apply at your course

Speaker: Elaine Fitzgerald, President, Fitzgerald Productions, Inc.

2:00 p.m.

YIELD MANAGEMENT: MAXIMIZING YOUR DAILY TEE SHEET

Greens fees. That's what drives the balance sheet in your operation. Yet every course has its down times. During this session you'll walk through strategies and tactics to market and promote your course during the on and off-peak periods and times.

- How, where, and when to advertise and promoteCreating pent-up demand
- Using suppliers to fill tee time
- New ways get the greatest yield from your tee time-your greatest commodity

Speaker: Gregg Gagliardi, Owner/PGA Pro, Lansbrook Golf Course, Palm Harbor, FL

3:00 p.m.

ANATOMY OF A TOURNAMENT OUTING

Planning a tournament from A to Z—a detailed inventory of things to do in a chronological sequence. The WHO, WHAT, WHEN, WHERE (your course!), WHY and HOW of staging a local tourney for profit and goodwill. Speaker, Vince Alfonso, as head pro and owner, successfully runs 200 tournaments annually!

- Successful tournaments are more difficult than they look
- Planning, Planning, Planning is the key to success
 Promotional ideas that work
- Making it fun for the staff and the customer

Learn how to run the "Pepsi Ultimate Challenge 2 -Day /2 -Person Scramble"—it's an idea that will make you money Speaker: Vince Alfonso Jr., Owner, The Rail Golf Club, Inc., Springfield, IL

those in planning and under construction. Identify critical components used in an analysis of the market to assess the feasibility for course development and expansion.

Identifying factors supporting future growth

Development Track

1:00 p.m., Room 7

Assessing the competition

ACCESS FACILITIES

Identifying a target market

• Financial proformas that lenders will fund

You'll come away with the important questions to ask in the current development and expansion climate to help you focus on the market and clientele

TRENDS IN THE U.S. GOLF MARKET FOR NEW AND EXISTING PUBLIC-

An overview of U.S. market trends in public-access facilities. Look at participation, rounds played, course openings,

Speakers: Rick Norton, VP Operations, National Golf Foundation and Barry Frank, Manager, National Golf Foundation

2:00 p.m.

WATER-QUALITY IMPACTS ON GOLF COURSES

Threats to ground and surface water are routinely raised by the public and officials during the permitting process. Get a thorough briefing on the impact of golf course development and operations on water quality, including prediction of quality, risk assessment, monitoring results, and integrated pest management.

- Planning for the permitting process
- Hydrology and agronomy basics
- Key environmental statutesLinkage of ground water and surface water
- Facilitate the permitting process by anticipating every question

Speaker: Stuart Cohen, President, Environmental and Turf Services, Inc.

3:00 p.m.

ALTERNATIVE GOLF DEVELOPMENTS: PROFITS IN GOLF COMPLEXES

A case study in success. Learn—from A to Z—the operational details of running an alternative golf facility—including beginner's group classes, golf pros on staff, age groups that use the complex, number of buckets sold, rounds of golf, prices, and miniature golf. You'll hear, firsthand, from one of the country's most successful range operators why having a golf complex with many alternative golf components is so important.

- Why alternative facilities make money and sense
- Promotional ideas

• Look at real numbers from an existing range operation You'll discover new ways to save money in the start -up and operation of an alternative golf facility that will benefit

your bottom line

Speaker: Dennis Tull, President, Smiley's Golf Complex, Overland Park, KS

Maintenance Track 1:00 p.m., Room 6B

MAINTENANCE ON A SHOESTRING

- Learn to cope with limited budgets, small staffs, and minimal resources and still have a more attractive course, healthier turf and improved course morale. Make every dollar count.
- Money-saving ways to maintain a course for peak performance
 Improve wear tolerance and drought resistance
- New ways to improve your course housekeeping habits and avoid maintenance pitfalls
- The tips presented in this session will improve your turf markedly
- Speaker: Patrick O'Brien, Director, USGA Green Section, Southeast Region

2:00 p.m.

DEALING WITH TRAFFIC: MAINTAINING QUALITY IN THE FACE OF HIGH VOLUME

Being a traffic cop is just another hat the superintendent must wear at a public-access course—if only we could

S IN GOLF COMPLEXES You'll



CONCURRENT CONFERENCE SESSIONS: SATURDAY, NOVEMBER 12



Development Track 1:00 p.m., Room 7

HOW TO DESIGN NEW GOLF COURSES OR RENOVATE EXISTING ONES TO BOOST THE BOTTOM LINE

Identify the specifics in golf course design that affect profits. Whether you are building or renovating, design can play a big part in your margin.

- Look at speed of play, increasing rounds, ease of maintenance
- Course design that is challenging, yet playable
 Long-term savings through proper design

Your course can have the best of both worlds, a "country club" atmosphere and still provide a 4-hour round through good design

Speaker: Robert Lohmann, President, Lohmann Golf Designs, Inc

2:00 p.m.

AVAILABILITY OF CAPITAL: TRADITIONAL AND NON-TRADITIONAL LENDERS

The recession that gripped American financial circles in the early 1990s scared off some investors. However, record course openings were logged in each of the last three years. Clearly, someone was securing capital. Look at the guidelines for approaching traditional and non-traditional lenders for consideration in financing new or existing golf course projects: information required, formatting your presentation or request, underwriter criteria, proposed terms and conditions.

Financing alternatives

Compare bank loan terms to other non-bank financing sources

 Setting realistic expectations in presenting a financial package You'll learn tips to ensure your project's success in securing funding

Speaker: Reid Marks, Sr. VP and Raleigh City Executive, NationsBank and Don Rhodes, VP, Golf & Recreational Financing, Nations Financial

3:00 p.m.

INNOVATIVE WAYS TO BUILD PUBLIC-ACCESS GOLF COURSES

Public courses face the dual challenge of meeting normal operating expectations while still keeping fees affordable. Explore popular financing vehicles and sources available to public entities, as well as innovative and successful public/private joint venture relationships.

Land dedications by private sector
Private development on public land

- Concessionaire alternatives
- Public funding vehicles

You'll learn how communities have provided public golf where typical fiscal restraints would not permit it Speaker: Greg Cory, Senior VP, Economics Research Associates and Jeff Witt, President, The Renizon Corp

Maintenance Track 1:00 p.m., Room 6B

ENVIRONMENTAL AND TURFGRASS RESEARCH—WHAT WE'VE LEARNED

A summary of the latest findings and results of USGA Green Section Research on turf and the environment. Access over 12 years of USGA research.

Strategies for further minimizing environmental impacts

 Learn about "new and improved" turfgrass varieties available Take advantage of the vast arsenal of information from the USGA

Speaker: John Foy, Director, USGA Green Section, Florida Region

2:00 p.m.

MAXIMIZING EQUIPMENT PRODUCTIVITY

A new course spends \$600,000 on new equipment but precious little attention to its preventive care and upkeep. Learn how to improve your equipment's productivity through proper selection, preventive maintenance, inventory control, and training. Give your equipment a longer lease on life with an ounce of prevention.

- Ideas for more efficient use of equipment fleet
- Tracking procedures for providing proper preventive maintenance
- Organization and control procedures

for parts and tool inventories

Operator training procedures

Record keeping

You'll reduce your long-range capital investment dollars through proper maintenance procedures. Learn how

Speaker: Cal Roth, Director of Golf Course Maintenance Operations, PGA Tour, Golf Course Properties, Inc., Ponte Vedra, FL

3:00 p.m.

STAFFING FOR SUCCESS

The one subject area they don't teach in turfgrass school is personnel management. And many times it becomes the one most crucial element of a superintendent's job. Speaker Pat McHugh operates five courses at Doral and is currently undertaking a renovation of the Blue Monster, the most famous of the five. Learn staff management secrets—from the crucial hiring process to training and then managing maintenance crews. • Hiring, training, and motivating

• Tips on managing your staff for success

Take home ways to create levels of professionalism for your staff

Speaker: Pat McHugh, CGCS, Director of Golf Course Management and Grounds, Doral Resort and Country Club, Miami, FL



Management & Marketing Track 1:00 p.m., Room 6A

CREATIVE PURCHASING: THERE'S STRENGTH IN NUMBERS

A look at group buying and the factors important to group purchasing—and how you can profit. Case studies from group purchasing success stories include range of savings by category, service and product enhancements.

Why you should be (but aren't) involved in a cooperative
Survey results of "big ticket" and secondary items that should be the focus of the group purchasing cooperative

Forming the cooperative

• Other options, like leasing—where it can work and where it can't

Profit from the strengths of group purchasing which combine the value of mutual cooperation with quality, service and economies of scales...higher quality of services and products for less money Speaker: Mike Tinkey, President, Sports Management and Marketing Services

peaker. whike rinkey, rresident, sports whanagement and wha

2:00 p.m.

AGRONOMY FOR NON-AGRONOMISTS

A "crash course" in what every manager and owner should know about agronomy and turfgrass management. Learn about how to talk "agronomeeze" with your superintendent from one of the country's leading superintendents who just received the Master Greenkeeper Certificate from the British and International Golf Greenkeeper Association (BIGGA)—one of eight recipients in the world.

- Demystify fertilization, weed control, plant growth regulators, fungicides, insecticides, IPM and what they mean for your golf course
- Ideas for golf course set up for hole locations, tee marker locations, soil and seeding divots, flagstick dimensions, flag and flagstick colors
 Bunker raking techniques, bunker sand testing, bunker edging and drainage to make more efficient use of labor
- Further taking techniques, bunker sand testing, bunker eiging and dramage to make more encient use of taking.
 Irrigation systems and watering practices, mowing strategies, people management, solding vs. seeding, employee scheduling, superintendent/mechanic relationships

Come with a sharp pencil to take lots of notes on turf management—you'll become an instant expert and be a hit at the next meeting with your super

Speaker: Terry Buchen, CGCS, Superintendent, Double Eagle Golf Course and Golf Course News' Savvy Superintendent Columnist

3:00 p.m.

MAINTAINING THE RIGHT OPERATIONAL FOCUS

The five best strategies to more effectively manage your course for profitability. Keep your eye on the prize and focus on the key issues that impact profitability most in the increasingly competitive golf industry.

- Rethink what is important in the operation of your course
- Recognize that corporate management techniques apply to you
- Understand that growing your business is becoming much more difficult and learn what you can do about it
- Receive a list of references to modernize your thinking about golf management
 You won't be satisfied with your current level of operating successes anymore

. You'll look at your business differently and make more money as a result

Speaker: Ken James, Sr. VP, Golf Operations, American Golf Corp

FRIDAY, NOVE	MBER 11			SATURDAY, N	OVEMBER 12		
9:00 a.m.	Keynote Speaker: A	rnold Palmer	and the local	9:00 a.m.	Opening Speaker: Ro	bert Trent Jones II	and the second second second
10:00 a.m 1:00 p.m.	Exhibits•Shop Talks•Lunch			10:00 a.m 1:00 p.m.	Exhibits•Shop Talks•Lunch		All Martin
	Development Track	Maintenance Track	Management & Marketing		Development Track	Maintenance Track	Management & Marketing
1:00 p.m.	Trends in the U.S. Golf Market for New and Existing Public-Access Facilities	Maintenance on a Shoestring	Creative Golf Marketing: How to Boost your Bottom Line without Spending a Fortune	1:00 p.m.	How to Design New Golf Courses or Renovate Existing Ones to Boost the Bottom Line	Environmental and Turfgrass Research— What We've Learned	Creative Purchasing There's Strength in Numbers
2:00 p.m.	Water Quality Impacts for Golf Courses	Dealing with Traffic: Maintaining Quality in the Face of High Volume	Yield Management: Maximizing your Daily Tee Sheet	2:00 p.m.	Availability of Capital: Traditional and Non-Traditional Lenders	Maximizing Equipment Productivity	Agronomy for non-agronomists
3:00 p.m.	Alternative Golf Developments: Profits in Golf Complexes	Water, Energy and Wildlife Conservation Measures on the Golf Course	Anatomy of a Tournament Outing	3:00 p.m.	Innovative ways to Build Public Access Golf Courses	Staffing for Success	Maintaining the Right Operational Focus
4:00 p.m 5:00 p.m.	Exhibits		T Howher	4:00 p.m 5:00 p.m.	Exhibits		inter sont



Floor Map



Golf Course Expo Exhibitor Index

AIMCOR Parkway N., Ste. 400 Deerfield, IL 60015 708-940-8700, Fax 708-940-0811 800-654-8793

BOOTH 442

PROFILE is a porous ceramic soil modifier that adds permanent pore space to the root zone of new and existing turf for improved drainage and reduced compaction.

.....

AMERICAN SOCIETY OF GOLF COURSE ARCHITECTS 221 N. LaSalle St. Chicago, IL 60601 312-372-7090, Fax 312-372-6160 BOOTH 321

A member of the American Society of Golf Course Architects is one by virtue of his/her knowledge of the game, training, experience, vision and inherent ability, in all ways qualified to design and prepare specifications for a course of functional and aesthetic perfection.

AQUA-TRIEVER/L&R ASSOCIATES 2 EMS W. 29 B Lane, PO Box 559 N. Webster, IN 46555 219-834-7337 BOOTH 137

Supplier of the newest and most innovative water hazard golf ball retrieval equipment, cleaning chemicals and methods, saving golf courses thousands of dollars annually.

BAYCO INDUSTRIES 2200 Logan Av. Winnipeg, Man., Can. R2R 0J2 204-633-5650, Fax 204-633-6119 BOOTH 127

......

Bayco Industries provides a line of golf course accessories. All items are made to the highest quality standards and designed at our modern 80,000 sq. ft. plant. Founded in 1941, manufacturing includes sand, permanent mold and die casting; full machining capabilities with CNC centres; assembly, tooling and quality assurance; complete design and engineering services. BURNS GOLF DESIGN 5449 Marsh View Ln. Fernandina Beach, FL 32034 904-277-4474, Fax 904-261-7005 BOOTH 444

Signature Quality, Generic PriceOver 30 years combined experience, including 13 years with Tom Fazio. Tour Pros available for a "signature". Private and municipal funding sources.

> CETCO 102 Conners Rd. Villa Rica, GA 30180 404-459-4995, Fax 404-459-0510 800-527-9948 BOOTH 223

.....

Produces Bentomat GCL (Geosynthetic Clay Liner) for containment of irrigation and aesthetic holding ponds and lakes.

CLUB CAR, INC. PO Box 204658 Augusta, GA 30917-4658 706-863-3000, Fax 706-860-7231 800-227-0739

BOOTH 101 Club Car's full line of 1995 models, including gasoline and electric golf cars, Fairway Villagers, and Carryall Utility and transportation vehicles.

CONTINENTAL BRIDGE 8301 State Hwy. 29 N. Alexandria, MN 56308 612-852-7500, Fax 612-852-7067 800-328-2047 BOOTH 428

Continental Bridge is the industry leader in providing prefabricated design/build bridging solutions for trails, golf courses, parks, elevated walkways, overpasses, snowmobile trails and vehicular access structures. CONVAULT FL, INC. 1410 Industrial Dr., PO Box 238 Wildwood, FL 34785-0238 904-748-6462, Fax 904-748-6820, 800-642-1540 BOOTH 251 otected above ground fuel and chemica

Protected above ground fuel and chemical storage systems, from 125 to 12,000 gallons with dual storage tanks available.

CORBIN'S BALED PINE STRAW, INC. 122 Mill Rd. McDonough, GA 30253-5916 404-957-5999, Fax 404-954-1772 BOOTH 327

Nation's largest pine straw distributor providing nurseries, universities and schools, landscapers, homeowners, and some of the world's finest golf courses. Pine straw is the final touch to a perfect landscape. Retains valuable water and protects plants from harsh weather. Baled pine straw is attractive and economical.

E-Z-GO TEXTRON PO Box 388 Augusta, GA 30903-0388 706-798-4311, Fax 706-796-4540 BOOTH 502

E-Z-GO, the world's leading golf car manufacturer, offers gas and electric golf cars plus a complete line of versatile turf utility vehicles.

ELL SYSTEMS AND SOFTWARE, INC. 14204 Carlson Circle Tampa, FL 33625 813-852-9610, Fax 813-855-7446 800-240-9247 BOOTH 129

PCMS covers all operational aspects of golf club management and consists of golf registration, tee-time scheduling, handicapping and tournament processing.

EMERALD ISLE, LTD. 2153 Newport Rd. Ann Arbor, MI 48103 313-662-2727, Fax 313-747-6617 800-628-GROW

BOOTH 215 Safe, effective products for turf: Panasea'/ Panasea' Plus Sea Plant Extract Biostimulants, Sand-Aid Granular Sea Plant Meal Soil Conditioner/Topdressing Constituent, Thatch-X Granular Thatch Reducer.

FAIRWAY STONE, LTD. 4675 Granite Dr. Tucker, GA 30084 404-414-0466, Fax 404-414-0176 800-TEE-SIGN

BOOTH 124

Fairway Stone is the national leader in granite tee-signs and markers for the golf industry. We serve the market in a factory direct sense with 12 quarries in five states.

FLOWTRONEX PSI LTD. 10717 Harry Hines Blvd. Dallas, TX 75220 214-357-1320, Fax 214-357-5861 800-527-0539 BOOTH 219

Manufacturers of the finest in pumping systems for the turfgrass and landscape industry. From VFD to fixed-speed, horizontal to vertical turbine, we use the latest technology to help you meet your irrigation needs.

FORE BETTER GOLF, INC. 177 Lockwood Lane Bloomingdale, IL 60108 708-893-8672, Fax 708-893-0455 800-468-8672 BOOTH 313

Scorecards and yardage books custom designed and printed. Course laser measuring and sprinkler tagging service. Customers include major tournament playing fields and world famous resorts.

Exhibitors At-A-Glance

int in onunee	
AIMCOR	442
ASGCA	321
Aqua-Triever/L&R Assoc	137
Bayco Industries	
Burns Golf Design	
CETCO	
Club Car, Inc	101
Continental Bridge	
0	
ConVault Fl, Inc.	
Corbin's Baled Pine Straw	
E-Z-Go Textron	
ELL Systems and Software	
Emerald Isle, Ltd	
Fairway Stone, Ltd	
Flowtronex PSI Ltd	
Fore Better Golf, Inc	313
Fresno Valves & Castings	234
Gold Medal Rec. Products	120
Golf Associates Scorecard	331
GCBAA	222
Golf Course News	
Golf Property Analysts	329
Gowan Company	
Greenscape Pump Services	
Harco Fittings	
Hollrock Golf Range Systems	
Horizon Golf	
Kirby Markers	125
Kwik-Trench	601
Landscape Mgmt. Magazine	
LasTec, Inc.	
Lofts Int'l Golf Development	
Mike Young Designs	
Milorganite	
Morgan Recreation Supply	
National Golf Foundation	
National Mower Company	
North American Golf, Inc	
O.M. Scott & Sons Co	
Otterbine Barebo, Inc	
PAGE-COM, Inc.	
Palmer Course Design	410
Palmer Golf Management	523
Par Aide Products Co	317
Plunkett-Webster, Inc	230
Precision Tool Products Co	119
Ransomes-Cushman-Ryan	202
Sandoz Agro, Inc	
Seed Research of Oregon	
SGD Company	
Smithco, Inc	
Southeastern Presentations	
Spencer Engine of Jacksonville	
Standard Golf Company	
Stroke Saver™	446
Sunbelt Services	
Tee Enterprises, Inc.	
Terracare Products Co., Inc	
Toro Company, The	
Trail Saw and Mower Service.	
Treegator-Spectrum Products	
Turf Diagnostics & Design	
Turfco Mfg., Inc.	
Verti-Drain/Emrex, Inc	
Yamaha USA Golf Car Group	
Yellow Pages of Golf	
York Bridge Concepts	
Zurich-American Insurance	519

An Exciting Show & Conference From the Publishers of *Golf Course News*



ORANGE COUNTY CONVENTION CENTER Orlando, Florida November 11-12, 1994

A NATIONAL EXHIBITION AND CONFERENCE FOR OWNERS, Superintendents, Managers, And Developers Of Public-access Golf Facilities



No other event brings together the professionals at public-access golf facilities. And you can be a part of it.

Now there is a national trade show and conference just for you superintendents, managers, owners, operators, and developers of publicaccess facilities. When you attend Golf Course Expo, you'll find us dedicated 100% to public-access golf—daily-fee, semi-private, resort, and municipal courses.

STRICTLY PUBLIC-ACCESS. No need to translate private gourse solutions to your public operation

The growth in public-access is staggering: 80 percent of the 1,300 courses that opened for play between 1990-93 were either daily-fee or municipal.

Yet this astounding growth is a double-edged sword. Clearly, the market is booming—but the boom also means more competition. In a crowded marketplace, maintaining quality conditions on your course in the face of high traffic, and at a reasonable cost is even more important. Marketing your course takes on added significance. And efficient management doing more with less—becomes an absolute must.

The key to success in any business—including the business of golf—is staying on top of new trends, partnering with vendors, and finding creative solutions. And Golf Course Expo is a carefully designed event to provide all three—and give you the edge.

IT ALL STARTS WHEN YOU TOUR THE EXHIBIT HALL

Save money and months of investigation by pinpointing the vendors who can help you on the trade show floor. Talk with the leading companies who'll be there for all your needs—equipment, chemicals, seed, builders, accessories, sod, golf cars, consultants, management software, fertilizers, architects, and marketing firms. Your free VIP Pass allows you entrance to the show floor.



TALK SHOP—RIGHT ON THE SHOW FLOOR

While you're in the Exhbit Hall, attend Shop Talks free of charge, as part of the Expo. During these vendor-sponsored sessions set up on the show floor, suppliers will showcase solutions, feature their products and services, and address critical industry trends. This is your chance to hear in-depth discussions from vendors on the use of their products.

Bring the whole team and multiply the benefits

Golf Course Expo is a must-attend for superintendents, managers, owners, operators, general managers, golf administrators, directors of parks and recreation, builders, architects, and developers. This is a great chance for all of the individuals who make buying decisions at your course to find key products and services that will help your facility operate more effectively and efficiently.

This is one show you simply can't afford to miss!

Bring this completed VIP Pass Registration Form with you to the show at the Orange County Convention Center, Orlando Florida.

Se Cut Here

FREE VIP PASS REGISTRATION FORM

Compliments of: Golf Course News

SAVE \$20! Bring this form to the show for free admission to the Exhibit Hall. This form may be photocopied for additional registrations—why not make a copy and bring your whole team—they'll save \$20 too.

GOLF course	NAME:					
		My Primary Business Is: (check one only)	FAX: FAX: Indel Annual Mainle I. Under \$50 I. Under \$50 I. Stoppone Stoppone Stoppone	anance Budgeł:		Key code: C Golf Course Expo is for trade professionals only, you must be 18 to be admitted.
C. Directo D. Club Pr E. Green (F Assistar G. Builder; H. Archite I. Researc	r of Golf/Head Pro esident Ihairman/Dir. Grounds ut Superintendent Developer ct/Engineer	- Froen/Private Course - 1. Semi-Private Course - 2. Private - 10.Other Golf Course: (please specify) - 5. Golf Course Architect - 6. Golf Course Paveloper - 7. Golf Course Builder - 9. Supplier/Sales Rep - 8. Other (please specify)	4. \$250,000- 5. \$500,000- 6. \$750,000- 7. Over \$1,00 Annual Capital Expr A. Under \$1	199,999 149,999 1,000,000 20,000 20,000 20,000 249,999 - 500,000	SHOW HOURS 10:00 - 5:00	ARE



Shop Talks — Open to All Expo Attendees

As a special feature of the Expo, show floor attendees are invited to attend ven-dor-sponsored sessions called Shop Talks. During these free sessions, conducted right on the show floor, suppliers will feature information on their products and services, solutions, or industry trends presented in an informal seminar style. And there will be plenty of time for Q &A.

FRIDAY, NOVEMBER 11

11 a.m. THATCH: CAUSES, SYMPTOMS & SOLUTIONS

PRESENTED BY EMERALD ISLE, LTD. Learn how to better manage problem thatch and reduce associated problems like localized dry spots, increased disease susceptibility, scalping, winter injury, etc. A look at he microbiology of thatch, factors that influence thatch accumulations, and proven method for thatch reductions PRESENTER: WILLIAM D. MIDDLETON,

PRESIDENT, EMERALD ISLE, LTD.



1 p.m. NEW AND PERMANENT SOLUTIONS TO SOME CHRONIC AND FRUSTRATING GOLF COURSE MAINTENANCE DECOMPLEME PROBLEMS

PRESENTED BY: AIMCOR Superintendents and owners will learn how to build better greens and tees using innovative new techniques during this Shop Talk. Learn how to make the proper decision whether to rebuild or renovate a problem green. Examine methods on how to dramatically improve or eliminate com-

paction and drainage problems Presenter: Lou Haines, Director of Technical Operations, Soils Manage-MENT TECHNOLOGIES



2 p.m. WHY DO NEW USGA GOLF GREENS STILL FAIL AFTER 30 YEARS OF TRIAL AND ERROR, AND WHO PAYS THE PRICE? PRESENTED BY: TURF DIAGNOSTICS & DESIGN

The operation of a qualified laboratory is the fulcrum point between failed greens, if properly utilized. Find out why having 18 quality golf greens was tantamount to winning the lottery over the last 30 years. PRESENTER: STEPHEN MCWILLIAMS, PRESI-DENT/CEO, TURF DIAGNOSTICS & DESIGN



3 p.m. SPRAYING: ENVIRONMENTAL COMPLIANCE CAN SAVE YOU MONEY

PRESENTED BY SMITHCO This Shop Talk session will demonstrate how proper spraying techniques; through use of new equipment, strict calibrations standards, and attention to manufacturer's labels can save money and



SATURDAY, NOVEMBER 12

SPECIAL EVENT! 10:30 -11:30 a.m.

Following his opening address, Robert Trent Jones Jr. will autograph copies of his popular book, Golf by Design: How to Lower your Score by Reading the Features of a Course. The book, which will be available for purchase, makes a great collector item for you or your favorite golfer. The coffee table book is in its second

printing just in time for Golf Course Expo and the holiday gift giving season. The publication provides hints for the golfer from the view of a designer and includes color photographs and drawings.

1:00 p.m. KOHLER ENGINES: THEN & NOW Presented by Spencer Engines of

JACKSONVILLE A sales and service update from the manufacturers of the Kohler engine. Please be

with us as we take an audio visual trek through Kohler Company's rich history and their bold experiments. The future of portable power and how you'll benefit from its development — its on display for you. PRESENTED BY: DAVID "JOE" SCHRIENER, DIRECTOR OF EDUCATION, SPENCER ENGINE





2 p.m. OLD TECHNIQUES AND THE MODERN GOLF COURSE

PRESENTED BY SEED RESEARCH OF OREGON A discussion of agronomic issues, focusing on the developments in turfgrass man-agement over the last 25 years, and the direction the industry must pursue in the future. The speaker will pay special attention to management budgets, turf quality, varietal improvements & the environment. PRESENTER: RICHIE VALENTINE, MAN-AGEMENT CONSULTANT/PRESIDENT, VALEN-

TINE AND ASSOCIATES

Troubled Waters?

OF JACKSONVILLE

Before water can enhance a landscape, it has to be healthy. The results of poor water management can be unsightly, smelly and costly. Otterbine quality water management keeps ponds and lakes sparkling,

clear and odor-free. Naturally, efficiently, and beautifully.

Otterbine CONCEPT₂ surface aerators give

nature a boost by stimulating natural water cleanup

processes. They offer interchangeable spray patterns for almost unlimited versatility.



The spectacular SUNBURST₂ from Otterbine's versatile CONCEPT₂ line; and the subsurface aerators TRITON and AIR FLO.

And our TRITON and AIR FLO subsurface aerators are virtually undetectable as they create strong currents to produce oxygen that cleans and purifies.

Rugged and built to last, all Otterbine aerators are simple to install. Efficient. Compact. Self-contained. Safety tested. And approved by the Electrical Testing Laboratory.

Our comprehensive product line ranges from the highest technology in aeration systems to

OTTERSHIELD, the new environmental lake dye. And we stand behind a 35-year tradition of quality, pride and fast, effective service.

Otterbine aerators, designed to move high volumes of water, are built for years of dependable service.

Call or write, today, to find out how Otterbine can help make your water work, beautifully.

Water works with Otterbine.

3840 Main Road East Emmaus, PA 18049 USA (610) 965-6018 1-800-AER8TER Golf Course Expo Booth #218 CIRCLE #120





FRESNO VALVES & CASTINGS, INC. 5740 Airport Rd. Sebring, FL 33870 813-655-3355, Fax 813-655-4299 800-392-9604 BOOTH 234

Fresno Valves & Castings, Inc. has been a leader in design and manufacturing of high quality irrigation valves, water control gates, and filtration equipment for over 40 years. With sales offices in nine states, we are able to offer prompt service and reliable technical support to any location in the U.S. GOLD MEDAL RECREATIONAL PRODUCTS 20 Blue Mountain Ave. Blue Mountain, AL 36201 205-237-9461, Fax 205-237-8816 800-633-2354 BOOTH 120

All types of protective netting, privacy screening, wind screens, custom golf cages and tee mats.

GOLF ASSOCIATES SCORECARD CO. 91 Westside Dr. Asheville, NC 28806 704-252-9867, Fax 704-252-9886 800-438-8726 BOOTH 331 World's largest producer of quality full color golf scorecards and granite golf course signage. GOLF COURSE BUILDERS ASSOCIATION OF AMERICA 920 Airport Rd., Ste. 210 Chapel Hill, NC 27514 919-942-8922, Fax 919-942-6955 BOOTH 222

Nonprofit trade association comprised of leading golf course builders and suppliers to the construction industry. Builder Certification Program fast becoming the industry standard.

GOLF COURSE NEWS 227 Second Ave. N. St. Petersburg, FL 33701 813-898-7077, Fax 813-825-0923 800-898-7077 BOOTH 436 The newspaper for the golf course industry offers timely news onmaintenance, development, management and supplier business.

Fast first aid for your tees.

Controlling divots on par 3 tees has always been tough business — especially when players have to walk from the tee to the bucket and back again. That's why our new Seed & Soil Caddie takes the best

ideas in divot repair and places them all at your players' fingertips, right next to the tee markers! To keep the rain out, we curved the spout. To make it easier to fill, we turned the entire

At last, you can say goodbye to buckets, boxes, scoops and spades.

bottom into a screw-off cap. To keep it close to potential divots, we made it as easy to move and position as the tee markers it's designed to



PLEASE FILL D

sit next to. And to remind players to use it, we even included a friendly reminder decal. Like all Standard Golf products, our new Seed & Soil Caddie is designed to last for years of trouble-free use. The integral steel spike is precision-welded for extra strength, and the large capacity

reservoir holds plenty of seed and soil. • Our new Seed & Soil Caddie makes it easier for players to keep tee areas healthy! Contact your nearby Standard Golf distributor and ask about our Seed & Soil Caddie. It's good medicine for your tees!



Standard Golf Company P.O. Box 68 Cedar Falls, Iowa 50613 U.S.A. 319-266-2638 FAX 319-266-9627 CIRCLE #121 GOLF PROPERTY ANALYSTS 4775 Linglestown Rd. Harrisburg, PA 17112 717-652-9800, Fax 717-652-8267 800-775-2669 BOOTH 329

Golf Property Analysts provide specialized appraisal feasibility analysis and consulting services for the golf course industry. GPA is a leader in providing professional real estate services and has a wide array of experience on a national basis.

GOWAN COMPANY 2809 Sunnydale Dr. St. Joseph, MI 49085 616-983-4656, Fax 616-983-7632 BOOTH 420

Manufacturer and toll formulator of insecticides, fungicides and herbicides primarily for U.S. retail Ag and T&O dealers, distributors and formulators. Products offered include Betasan, Tupersan, Meta Systox R2 T&O.

GREENSCAPE PUMP SERVICES, INC.

556 Coppell Rd. Coppell, TX 75019 214-393-0346, Fax 214-393-2337 BOOTH 139

The Float-N-Screen® and Float-N-Foot Valve® were designed to place the water intake in the first few feet of water away from the debris collected bottom.

> HARCO FITTINGS PO Box 10335 Lynchburg, VA 24506 804-845-7094, Fax 804-845-8562 BOOTH 232

Harco Fittings - Ductile iron pipe fittings for PVC irrigation pipe.

HOLLROCK GOLF RANGE SYSTEMS PO Box 378, 294 Russell St. Hadley, MA 01035 413-586-4653, Fax 413-586-3299 800-487-2643 BOOTH 145

Hollrock Engineering and Golf Range Systems, is a 21 year veteran at manufacturing high quality range equipment. At Hollrock, we feel that a company's warranty is a revealing self portrait of its quality, integrity and philosophy. We are very proud and confident to offer the best warranties in the world with three year and lifetime warranties on our range equipment. Hollrock Engineering is the leader in completely automated, range ball collection, and pneumatic delivery systems to multiple and remote dispensers.

HORIZON GOLF 901 Cedar Hill Dr., Ste. 100, PO Box 4499 Evansville, IN 47724 812-867-9333, Fax 812-867-9231 800-545-9210 BOOTH 416

Directing the manufacture, delivery, installation, and certification of quality golf course water feature design components is the sole business of Horizon Golf.

KIRBY MARKERS 6108 Avenida Encinas Carlsbad, CA 92009-1008 619-931-2624, Fax 619-931-1753 800-925-4729 BOOTH 125

Patented fairway yardage marking system placed at 25 yard intervals, on both sides of the fairway. Depresses under mowers and carts, speeds up play, and increases enjoyment. Kirby is a three year old company whose system is installed at 250 courses worldwide.

KWIK-TRENCH 205 Homestead Rd. Lehigh, FL 33936 813-369-7911, Fax 813-369-4204, 800-327-4997 BOOTH 601

Kwik-Trench earth saw V-belt disc blade drive - the only 3 in I walk-behind trenchers on the market. Root Pruner, Trencher, Asphalt Cutter.





LANDSCAPE MANAGEMENT MAGAZINE 7500 Old Oak Blvd. Cleveland, OH 44130 216-826-2830, Fax 216-891-2675 800-225-4569 BOOTH 217

Landscape Management magazine serves the landscape and golf industries on a monthly frequency and is an information source and link between product manufacturers and end users of manufacturers' products.

.....

LASTEC, INC. 7865 N. CR 100 E. Lizton, IN 46149 317-892-4444, Fax 317-892-4188 BOOTH 341

The Articulator is a wide area floating rotary mower. Seven floating heads have a 10 foot cutting capacity. Perfect for overseeded and Bermuda roughs and finish cutting.

LOFTS INT'L GOLF DEVELOPMENT DIV.

Chimney Rock Rd., PO Box 146 Bound Brook, NJ 08805 908-560-1590, Fax 201-267-8358 800-526-1590 BOOTH 343

Turfgrass varieties available for 1995: Southshore and Crenshaw Creeping Bentgrasses. New fertilizer grow-in program. Lofts golf turf specialists are available for free consultations.

> MIKE YOUNG DESIGNS PO Box 289 Watkinsville, GA 30677 706-769-7415, Fax 706-769-8538

BOOTH 345 Mike Young Designs specializes in the de-

sign of quality, affordable upscale daily fee golf courses.

MILORGANITE 1101 N. Market St. Milwaukee, WI 53203 414-225-3333, Fax 414-225-3495 BOOTH 214

Milorganite®, the natural organic fertilizer that's been the golf course choice for the finest turf. Dating to 1926, Milorganite® has been the leading fertilizer used on tournament courses and country clubs.

.....

MORGAN RECREATION SUPPLY, INC. (DNA ENTERPRISES) PO Box 263 Talcott, WV 24981 304-466-3089, Fax 800-253-7053 800-253-7053 BOOTH 221

Manufacturers and marketers of the Protective Sun Helmet for all golf course personnel for protection from flying golf balls and the harmful effects of the sun's rays. Made of light weight and durable plastic, this U.S. made helmet is cool and comfortable because of the louvered air vents on each side allowing cross ventilation. Our company also manufactures and markets the "Weather Guard Rain Caddy" to protect your clubs and bag when caught in the rain.

NATIONAL GOLF FOUNDATION 1150 S. Highway U.S. 1 Jupiter, FL 33477 407-744-6006, Fax 407-744-9085 800-733-6006

BOOTH 131 Golf industry trade association specializing in market research, golf course development and operations publications, maintenance and environmental studies, and golf course development feasibility studies.

NATIONAL MOWER COMPANY 700 Raymond Ave. St. Paul, MN 55114 612-646-4079, Fax 612-646-2887 BOOTH 402

National Mower has manufactured heavy duty power mowers for 75 years. We are known for mow slopes, simple design, and low cost machines that can handle the riggers of the grow in period of new golf course construction. NORTH AMERICAN GOLF, INC. 350 N. LaSalle, Ste. 720 Chicago, IL 60610 312-822-9188, Fax 312-595-1136 BOOTH 224

North American Golf is a full service company in the development and management of public golf courses and private golf clubs. The company has been in business since 1985 and has the ability to take any golf project from start to finish. The company has been involved in the design, development and operation of more than 100 golf courses. O.M. SCOTT & SONS COMPANY 14111 Scottslawn Rd. Marysville, OH 43041 513-644-0011, Fax 513-644-7308 800-543-0006 BOOTH 506

Scotts ProTurf products have been specially developed for golf courses. Scotts product line includes fertilizers and fertilizer/ control combinations, herbicides, fungicides, insecticides, growth regulators, seed and application equipment. These products are serviced by a highly trained network of technical representatives and research stations located across the nation. OTTERBINE BAREBO, INC. 3840 Main Rd. E. Emmaus, PA 18049 610-965-6018, Fax 610-965-6050 800-AER8TER BOOTH 218

Otterbine manufactures a full line of water quality management products including surface aerators, sub-surface aerators, dewatering bunker pumper and Ottershield lake dye. Worldwide distribution and service.

PAGE-COM, INC. 11545 Pagemill Rd. Dallas, TX 75243 214-680-9750, Fax 214-349-8950 800-527-1670 BOOTH 605 PAGE-COM sells and services portable two-way communication systems as well as on-site paging systems. Our sales staff can design the best system for your needs. PALMER COURSE DESIGN COMPANY 572 Ponte Vedra Blvd. Ponte Vedre Beach, FL 32082 904-285-3960, Fax 904-285-2119 BOOTH 410

Palmer Course Design Company is a complete worldwide golf course planning and design organization, involved in over 141 golf course projects covering 28 states and 15 countries. The foundation of its design and business philosophy is the genuine, traditional and sound standard of excellence that Arnold Palmer has demonstrated throughout his life and career. The entire staff of the Palmer Course Design Company is driven by the highest degree of professionalism and urgency for our client's needs and requirements.

More Exhibitors on page 32

EVERY MORNING, THERE ARE TWO THINGS YOU CAN COUNT ON:

THE SUN WILL COME UP. YOUR CARRYALL WILL GO TO WORK. THAT'S RELIABILITY. [*according to a recent survey of golf course superintendents, the carryall by club car' is the most reliable lightweight turf utility vehicle on the market.**] AND NOW THAT OUR CARRYALL II PLUS HAS A NEW, MORE POWERFUL 11-HP, 4-CYCLE ENGINE, IT CAN ONLY GET BETTER. FOR PERFORMANCE, SERVICE, AND SUPPORT, RELY ON **CARRYALL**. CALL 1-800-643-1010 AND **DRIVE IT TO WORK**.

ARRYALL-II P

Chub Ca



PALMER GOLF MANAGEMENT 9000 Bay Hill Blvd Orlando, FL 32819 407-876-6700, Fax 407-876-6262 BOOTH 523

Arnold Palmer Golf Management Company is a leading golf management firm, with reputation as the quality leader in the industry. The company has been a leading provider of contracted management services to quality golf facilities since 1984, and since 1993 has been acquiring and leasing top quality municipal, private, semi-private and resort courses in the U.S. and abroad.

PAR AIDE PRODUCTS COMPANY 3565 Hoffman Rd. E. St. Paul, MN 55110 612-779-9851, Fax 612-779-9854 **BOOTH 317**

.....

Recognized and respected world wide, Par Aide will be displaying their full line of premium golf course accessories, including their famous ball washers.

PLUNKETT-WEBSTER, INC. PO Box 69 South Windsor, CT 06074 203-289-1121, Fax 203-289-9594, 800-243-2283

BOOTH 230

We are a wholesale supply company specializing in typar fabrics and turf blankets. We also distribute Trex Composite Wood

..... PRECISION TOOL PRODUCTS COMPANY 7836 Bethel Church Rd. Saline, MI 48176 313-429-9571, Fax 313-429-3985 800-253-2112 BOOTH 119

Precision Tool Products Company manufactures the ACCU-GAGE™, GROOMER-GAGE[™], and BENCH-PLATE[™] to accurately adjust mowers. The company also manufactures and distributes shop and golf course supplies.

RANSOMES - CUSHMAN - RYAN PO Box 82409 Lincoln, NE 68501-2409 402-475-9581, Fax 402-474-8522 800-228-4444 BOOTH 202

Ransomes America Corporation manufactures turf maintenance equipment under the Ransomes, Cushman and Ryan brand names. The company's full product line includes the Cushman Turf-Truckster utility vehicle. Ryan GA 30 greens aerator, Ransomes 300 'right weight" fairway mower, and the Ransomes E-Plex - the new "all electric" greens mower. The company is committed to serving the needs of golf course superintendents through its extensive North American dealer network.

> SANDOZ AGRO, INC. 1300 E.Touhy Ave. Des Plaines, IL 60018 708-390-1616, Fax 708-390-3940 800-435-TURF BOOTH 246

.....

Manufacturer of Barricade Herbicide, a new preemergent herbicide for the long term control of grass and broadleaf weeds, Sentinel Fungicide for broad spectrum control and Mavrik Insecticide

SEED RESEARCH OF OREGON PO Box 1416 Corvallis, OR 97339 Fax 503-758-5305, 800-253-5766 BOOTH 228

For 11 years, we have been devoted to unequaled customer service, and the improvement of turfgrass through sound research. And the commitment continue

.....

SGD COMPANY PO Box 8410 Akron, OH 44320 216-239-2828, Fax 216-239-2668, 800-321-3411 Eastern U.S., 800-821-3880 Western U.S. BOOTH 527

SGD is a major manufacturer and distributor of equipment for golf practice facilities, golf courses (Standard Golf and Par Aide), and family fun centers.

SMITHCO, INC 11 West Ave. Wayne, PA 19087 215-688-4009, Fax 215-688-6069 BOOTH 402

Smithco is a manufacturer of golf course maintenance equipment, including bunker rakes, sprayers, sweepers, and utility vehicles that are marketed through an international distribution network.

...... SOUTHEASTERN PRESENTATIONS,

6845 Narcoossee Rd., Ste. 50 Orland, FL 32822 407-281-8465, Fax 407-281-8468

800-749-6966 Воотн 144 The company your golf development needs to know. Specializing in golf course and resort scale models, sales center design and manufacturing, cuatom golf course And de-

velopment signage conveniently under one

roof.

..... SPENCER ENGINE OF JACKSONVILLE, INC. 5200 Sunbeam Rd. Jacksonville, FL 32257 904-262-1661, Fax 904-262-6229 800-749-3834 BOOTH 115

The company provides Kohler engines and parts.

STANDARD GOLF COMPANY 6620 Nordic Dr. Cedar Falls, IA 50613 319-266-2638, Fax 319-266-9627 800-553-1707

BOOTH 333 Standard Golf Company is the largest manufacturer of golf course accessories in the world. Founded in 1910, their product line consists of ball washers, flag sticks, flags, putting cups, bunker rakes and many maintenance tools for the golf course superintendent

......

STROKE SAVER™ M PO Box 26236 Rochester, NY 14626 716-227-9350, Fax 716-227-9350 800-546-5798 BOOTH 446 Stroke Saver™ ultrasonic golf club cleaner, a high tech, low cost, user friendly method to clean a full set of clubs in just minutes. Truly

nity SUNBELT SERVICES 7610 U.S. Highway 41 North Palmetto, FL 34221 813-723-1494, Fax 813-729-2814 800-726-5215

a "rags to riches" vending machine opportu-

BOOTH 515 Our goal is to provide quality service and an outstanding product while maintaining a low cost to our customers.

.....

TEE ENTERPRISES, INC. 1005 N. Decatur St., PO Box 308 Watkins Glen, NY 14891 607-535-9216, Fax 607-535-4669 800-831-0302 BOOTH 315

Provides custom-built redwood teemarker signs and benches to golf courses free of charge with annual maintenance, guaranteed delivery and immediate replacement if vandalized.

TERRACARE PRODUCTS CO., INC. W6179 Hwy. 33 Pardeeville, WI 53954 608-429-3402, Fax 608-429-2889

BOOTH 121 Terracare Products Inc. manufactures aerators, top dresser, pick up sweeper and a broom.

TORO COMPANY, THE 300 Technology Park Lake Mary, FL 32746 407-333-3600, Fax 407-333-9246 800-393-8873 BOOTH 122

Toro is the leading edge manufacturer of top quality turf maintenance equipment, vehicles, and computerized irrigation systems for the golf industry.

TRAIL SAW AND MOWER SERVICE, INC 4440 N. Orange Blossam Trail Orlando, FL 32804 407-293-1861, Fax 407-295-4263 800-881-1861 BOOTH 430

Serving central Florida for 30 years, we proudly offer 40 lines of outdoor power equipment, parts and service. We are a full line Kubota Tractor dealer.

TREEGATOR - SPECTRUM PRODUCTS PO Box 18187 Raleigh, NC 27604 919-878-8911, Fax 919-872-6173 800-800-7391

BOOTH 424 Treegator - Portable drip irrigation system

for trees, up to 50 gallons of water with no runoff. Zips around trunk and fills in seconds. Reduce frequency by 50%. Save time, money, trees, and water.

TURF DIAGNOSTICS & DESIGN, INC. 310-A North Winchester St. Olathe, KS 66062 913-780-6725, Fax 913-780-6759

BOOTH 531

Turf Diagnostics & Design, Inc. is a physical evaluation laboratory and agronomic consulting company serving the golf and sports turf industry. We are applying the innovative use of technology in the design, implementation and agronomic operation of high performance turf systems.

..... TURFCO MFG., INC 1655 101st Ave., NE Minneapolis, MN 55449 612-785-1000, Fax 612-785-0556 BOOTH 402

..... VERTI-DRAIN/EMREX, INC. PO Box 1349 Kingston, PA 18704 717-288-9360, Fax 717-288-9023 800-521-5350

BOOTH 116 Verti-Drain deep tine aerators are avail able in a full range of sizes. All ten models

feature a unique patented "pitchfork-type" action. Maximum penetration to 24". YAMAHA USA GOLF CAR GROUP

1000 Hwy. 34 E.

Newnan, GA 30265 404-254-4150, Fax 404-254-4158 800-843-3354 ext. U1 BOOTH 142 YAMAHA USA Golf Car Group repre-

sents Yamaha Motor Co. in the golf and utility vehicle industry. The company introduced a new gas and electric golf car, the G14 "Ultima" in September 1994. Yamaha products are sold and serviced through Yamaha's dealer network in conjunction with complete sales and service support from the Georgia National Headquarters.

YELLOW PAGES OF GOLF 8122 Southpark Ln., Ste. 200 Littleton, CO 80120 303-730-3030, Fax 303-730-3092 800-864-2754

BOOTH 244 A complete industry buying guide featuring

course, report, manufacturers, and distributors encompassed in a yellow pages format. Everything from A to Z in golf.

YORK BRIDGE CONCEPTS 1426 W. Busch Blvd. Tampa, FL 33612 813-933-1304, Fax 813-932-6486 800-226-4178

BOOTH 323 Providing the golf course industry with a complete scope of services in timber bridge and bulkhead construction. We specialize in wetlands installation using the highest stan-

dards of design and quality. ZURICH-AMERICAN INSURANCE 1400 American Lane Schaumburg, IL 60196 708-605-6500, Fax 708-605-7605

BOOTH 519 One of the leading insurance companies in the U.S. with an A+ rating, Zurich-American specializes in insurance coverages for upscale golf facilities.

Golf Course Expo Product/Service Index

.. 428

Aqu

Baye

Kirt

Par

Smi

Star

Tee

Aqu

O.N

Sar

CE

Yor

AIN

Go

Nat

Pali

Tur

Bur

Mil

Pal

Sur

Tur

Lof

Mil

O.N

Clu

E-Z

Yan

Fre

Gre

Har

Sur

Tor

Tre

M

Clu

E-Z

Las

Nat

Rat

Tor

Tra

Yar

Lot

O.N

See

AI

S

ZO

Am

Arc Tr

Áqı W

CE

ACCESSORIES	Continental Bridge
	Prefabricated bridging solutions
a-Triever/L&R Associates 137	ConVault Fl, Inc
to Industries 127	Protected aboveground storage
vay Stone, Ltd 124	systems
Better Golf, Inc	Corbin's Baled Pine Straw, Inc Pine straw/mulch
y Markers 125	ELL Systems and Software, Inc
Aide Products Company	Public access course managemen
ision Tool Products Company 119	software
theo, Inc 402	Emerald Isle, Ltd
dard Golf Company 333	Biostimulants, Soil conditioner,
Enterprises, Inc	Topdressing amendment, Thatcl
CHEMICALS	reducers, Liquid iron supplemen
CHEMICALS	Flowtronex PSI Ltd Pumping System Manufacturer
a-Triever/L&R Associates 137	Fore Better Golf, Inc.
van Company 420	Scorecards, Yardage books, Sprin
1. Scott & Sons Company 506	tags, Laser measuring, Fairway
doz Agro, Inc 246	markers
CONCERNICETION	Gold Medal Recreational Product
CONSTRUCTION	Protective netting Golf Associates Scorecard Co
ГСО 223	Golf scorecards, Golf course sign
belt Services 515	Golf Course Builders Association
k Bridge Concepts 323	America
	Trade association
CONSULTANTS & COURSE	Golf Course News
MANAGEMENT	Publication Golf Property Analysts
1COR 442	Appraisal, Feasibility analysis,
f Property Analysts 329	Consulting
ional Golf Foundation 131	Greenscape Pump Services, Inc
th American Golf, Inc 224	Filtration, Pumps
ner Golf Management Co 523	Hollrock Golf Range Systems
d Research of Oregon 228 f Diagnostics & Design, Inc 531	Golf range equipment Horizon Golf
Diagnostics & Design, me 331	Water feature products & instal
DESIGN	Kirby Markers
	Fairway yardage markers
ns Golf Design 444	Kwik-Trench
e Young Designs	Disc blade trenchers
ner Course Design Company 410 belt Services	Landscape Management Magazin
f Diagnostics & Design, Inc 531	Trade magazine Morgan Recreation Supply, Inc.
r Diagnostics & Design, mer in 991	(DNA Enterprises)
FERTILIZERS	Protective sun helmets, Rain co
	for golf bags
s Int'l Golf Development Div. 343	National Golf Foundation
organite	Golf industry research and publi tions
1. Scott & Sons Company 500	Otterbine Barebo, Inc
GOLF CARS	Pond and lake aeration equipme
	PAGE-COM, Inc.
b Car, Inc 101	Portable two-way communication
-GO Textron 502 naha USA	equipment, On-site paging syste
nana USA 142	Palmer Golf Management Co Purchaser of Golf Courses
IRRIGATION & DRAINAGE	Plunkett-Webster, Inc.
	Turf blankets, Geotextile fabrics
sno Valves & Castings, Inc 234	Composite wood products, Root
enscape Pump Services, Inc 139	control fabrics
co Fittings	Precision Tool Products Compan
o Company, The 122	Tools and shop supplies SGD Company
egator - Spectrum Products 424	Range/Course equipment
	Smithco, Inc
OWERS & UTILITY VEHICLES	Riding bunker rakes, Sprayers,
h Can Inc. 101	Sweepers
b Car, Inc 101 -Go Textron 502	Southeastern Presentations, Inc. Sales models
Tec, Inc	Spencer Engine of Jacksonville, I
ional Mower Company 402	1
nsomes - Cushman - Ryan 202	Kohler engines and parts
ithco, Inc	Stroke Saver TM
o Company, The 122 il Saw and Mower Service 430	Golf club cleaning vending mac
naha USA Golf Car Group 142	Tee Enterprises, Inc Signage and benches
and correctine our creat man 112	Terracare Products Co., Inc
TURF & SEED	Aerators, Top dressers, broom, I
	up sweeper
ts Int'l Golf Development 343	Trail Saw and Mower Service, In
A. Scott & Sons Company 506 d Research of Oregon 228	Kubota Tractors and Kubota rel equipment
a recourse of cregori minimum 220	Verti-Drain/Emrex, Inc.
MISCELLANEOUS	Over seeders, Deep aerators
	YAMAHA USA Golf Car Group
ACOR	Golf car accessories
il modifiers for turfgrass root	Yellow Pages of Golf
nes erican Society of Golf Course	Golf Buying Guide and Director (publication)
hitects	York Bridge Concepts
ade association	Timber: Bridge, Bulkhead, Boar
ua-Triever/L&R Associates 137	Construction, Design
ater hazard golf ball retrieval	Zurich-American Insurance
ГСО 223	Insurance services

Bentomat-GCL for lining o irrigation and aesthetic holding ponds and lakes

Corbin's Baled Pine Straw, Inc 327
Pine straw/mulch ELL Systems and Software, Inc 129
Public access course management
software
Emerald Isle, Ltd
Topdressing amendment, Thatch
reducers, Liquid iron supplement
Flowtronex PSI Ltd 219 Pumping System Manufacturer
Fore Better Golf, Inc
Scorecards, Yardage books, Sprinkler
tags, Laser measuring, Fairway markers
Gold Medal Recreational Products 120
Protective netting
Golf Associates Scorecard Co 331 Golf scorecards, Golf course signage
Golf Course Builders Association of
America 222
Trade association Golf Course News
Publication 430
Golf Property Analysts 329
Appraisal, Feasibility analysis, Consulting
Greenscape Pump Services, Inc 139
Filtration, Pumps
Hollrock Golf Range Systems 145
Golf range equipment Horizon Golf 416
Water feature products & installation
Kirby Markers 125
Fairway yardage markers Kwik-Trench
Disc blade trenchers
Landscape Management Magazine 217
Trade magazine Morgan Recreation Supply, Inc.
(DNA Enterprises)
Protective sun helmets, Rain covers
for golf bags National Golf Foundation
Golf industry research and publica-
tions
Otterbine Barebo, Inc 218
Pond and lake aeration equipment PAGE-COM, Inc
Portable two-way communication
equipment, On-site paging system
Palmer Golf Management Co 523 Purchaser of Golf Courses
Plunkett-Webster, Inc 230
Turf blankets, Geotextile fabrics,
Composite wood products, Root control fabrics
Precision Tool Products Company 119
Tools and shop supplies
SGD Company 527
Range/Course equipment
Range/Course equipment Smithco, Inc
Smithco, Inc
Smithco, Inc 402 Riding bunker rakes, Sprayers, Sweepers
Smithco, Inc
Smithco, Inc
Smithco, Inc
Smithco, Inc
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts Stroke Saver™ Stroke Saver™ 446 Golf club cleaning vending machine
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts Stroke Saver™ Stroke Saver™ 446 Golf club cleaning vending machine 315
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Stoke regines and parts 115 Kohler engines and parts 446 Golf club cleaning vending machine 446 Tee Enterprises, Inc. 315 Signage and benches 315
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts Stroke Saver™ Stroke Saver™ 446 Golf club cleaning vending machine 315
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 12 Tee Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 12 Tee Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 12 Tee Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc.430 Kubota Tractors and Kubota related equipment 1
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Symphone 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 115 Tere Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment Verti-Drain/Emrex, Inc. 116
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 115 Tere Enterprises, Inc. 315 Signage and benches 1121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment Verti-Drain/Emrex, Inc. 116 Over seeders, Deep aerators 116
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 126 Tee Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment Verti-Drain/Emrex, Inc. 116 Over seeders, Deep aerators YAMAHA USA Golf Car Group 142 Golf car accessories 142
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 12 Tee Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment 116 Over seeders, Deep aerators YAMAHA USA Golf Car Group 142 Golf car accessories 244
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 12 Tee Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment 116 Over seeders, Deep aerators YAMAHA USA Golf Car Group 142 Golf car accessories 244 Golf Buying Guide and Directory
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 12 Tee Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment Verti-Drain/Emrex, Inc. 116 Over seeders, Deep aerators YAMAHA USA Golf Car Group 142 Golf car accessories Yellow Pages of Golf 244 Golf Buying Guide and Directory (publication) York Bridge Concepts 323
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 126 Tee Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment Verti-Drain/Emrex, Inc. 116 Over seeders, Deep aerators YAMAHA USA Golf Car Group 142 Golf car accessories Yellow Pages of Golf 244 Golf Buying Guide and Directory (publication) York Bridge Concepts 323 Timber: Bridge, Bulkhead, Boardwalk
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 12 Tee Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment Verti-Drain/Emrex, Inc. 116 Over seeders, Deep aerators YAMAHA USA Golf Car Group 142 Golf car accessories Yellow Pages of Golf 244 Golf Buying Guide and Directory (publication) York Bridge Concepts 323 Timber: Bridge, Bulkhead, Boardwalk
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 126 Tee Enterprises, Inc. 315 Signage and benches 121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment Verti-Drain/Emrex, Inc. 116 Over seeders, Deep aerators YAMAHA USA Golf Car Group 142 Golf car accessories Yellow Pages of Golf 244 Golf Buying Guide and Directory (publication) York Bridge Concepts 323 Timber: Bridge, Bulkhead, Boardwalk
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 115 ree Enterprises, Inc. 315 Signage and benches 1121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment Verti-Drain/Emrex, Inc. 116 Over seeders, Deep aerators YAMAHA USA Golf Car Group 142 Golf car accessories Yellow Pages of Golf 244 Golf Buying Guide and Directory (publication) York Bridge Concepts 323 Timber: Bridge, Bulkhead, Boardwalk Construction, Design Zurich-American Insurance 519
Smithco, Inc. 402 Riding bunker rakes, Sprayers, Sweepers Southeastern Presentations, Inc. 144 Sales models Spencer Engine of Jacksonville, Inc. Spencer Engine of Jacksonville, Inc. 115 Kohler engines and parts 115 Stroke Saver™ 446 Golf club cleaning vending machine 115 ree Enterprises, Inc. 315 Signage and benches 1121 Aerators, Top dressers, broom, Pick up sweeper Trail Saw and Mower Service, Inc. 430 Kubota Tractors and Kubota related equipment Verti-Drain/Emrex, Inc. 116 Over seeders, Deep aerators YAMAHA USA Golf Car Group 142 Golf car accessories Yellow Pages of Golf 244 Golf Buying Guide and Directory (publication) York Bridge Concepts 323 Timber: Bridge, Bulkhead, Boardwalk Construction, Design Zurich-American Insurance 519

DEVELOPMENT

BRIEFS



BUILDERS BUILD DATA BASE

CHAPEL HILL, N.C. - The Golf Course Builders Association of America (GCBAA) hopes to be able to answer in early 1995 what it costs to build a golf course. A survey of GCBAA builder members, on projects they have completed, divided the country into four regional zones and contained 25 areas of construction costs. GCBAA Executive Director Phil Arnold said the data will be compiled by his staff, formatted for distribution as appropriate, and updated annually.

HUEBER JOINS FLOYD GROUP

MIAMI BEACH. Fla. - David B. Hueber has been appointed president

.....



Raymond Floyd Group. Hueber has served as president and CEO of Accuform Golf Corp, Ben Hogan Co. and Hogan Ben Properties and the

National Golf Foundation

The Raymond Floyd Group brings under one umbrella an organization of existing companies related to Floyd's golf course design work, acquisition and management of golf courses, sports marketing, tournament and event marketing, as well as corporate relationships and licensing.

DOAK PULLS NO PUNCHES

TRAVERSE CITY, Mich. Architect Tom Doak's Confidential Guide to Golf Courses", an update of a 1987 edition circulated to only 40 of his friends, is a no-holdsbarred review of more than 880 courses around the word. Hundreds of courses around the world are rated on architectural merits on a 0-10 scale in summaries from 50 to 500 words. List price is \$100. Order through Renaissance Golf Design, Inc. 10656 S. Timberlee, Traverse City, Mich. 49684.

NIEBUR, BAIRD MOVE FIRMS

Gary Roger Baird and Joe Niebur have announced they have moved their respective companies to new headquarters.Baird Design International, Ltd. has moved from Nashville, Tenn., to Brentwood, Tenn., and opened a West Coast office in Santa Ana, Calif. Baird's Brentwood address is 5123 Paddock Village Court, Suite A21; telephone 615-373-9610. His Santa Ana address is 2807 Catherine Way; telephone 714-476-6878. Meanwhile, Niebur's golf course building firm, Niebur Golf, has moved from Medford, Ore., to Colorado Springs, Colo. Niebur is located at 655 Southpoint Court, Suite 100; telephone 719-527-0313. GOLF COURSE NEWS

A unique breed: supers-turned-designers

By MARK LESLIE

heir number is so small they do not even constitute a

fraternity - these superintendents-turned-architects. But their perspective is unique in the world of golf course design, construction and maintenance.

"I ruined two golf holes when I was a superintendent," admitted Keith Foster, and the architect was none other than Robert Trent Jones, who had done "a wonderful job."

"I've had a couple of courses I've taken my name off because

maintenance was so poor that I didn't want anybody to know I had anything to do with them," said Jack Snyder, a Class AA superintendent and a fellow and former president of the American

Society of Golf Course Architects (ASGCA).

"Being a superintendent is not one of the easiest jobs in the world," said Jan Beljan, a former GCSAA scholarship recipient who is now an ASGCA member and a lead architect with Tom Fazio Golf Course Designers, Inc. "As a golf course designer with a superintendent's background, you understand what the superintendent will have to face, what his budgets are now and what they will be, say, in the event the members buy the club in five years and won't maintain it the way it was designed."

The few supers-turned-architects "are not dealing with an ivory-tower approach, but with grunt-level determinations," declared Dr. Michael

Hurdzan, who not only was a superintendent at one time but holds master's and doctoral degrees relating to turfgrass. He is also past president of the ASGCA.

Snyder, 76, of Phoenix, Ariz., is the dean of this group who once punched the time clock as superintendents but now do business under the moniker "Golf Course Designer." The group also numbers Bobby Weed of Ponte Vedra, Fla., Craig Schreiner of Kansas City and Brian Silva of Uxbridge, Mass.

Some feel an education in turfgrass management is crucial for a golf course designer. One Southeastern superintendent called "the lack of understanding of maintenance complexes" a "glaring hole" in the golf Continued on page 38

Dye teams with Landmark Golf, Paiute Tribe on 4-course project

LAS VEGAS, Nev. - The first of four championshipcaliber, public golf courses at the Las Vegas Paiute Resort, all designed by Pete Dye, will open next March, according to a joint announcement from the Las Vegas Paiute Tribal Council and Landmark Golf Co.

It is the first time Dye has created four golf courses at the same site, and he said: "It's hard to top yourself. But I'm going to try.'

The courses will be built around a central resort core and have real-estate within them. The site, on the Paiute Reservation at Snow Mountain, about 18 miles north of downtown Las Vegas, is "a beautiful, natural desert setting," Dye said.

first course, The measuring 7,130 yards, features expansive views of Mount Charleston to the west and Sheep Mountain to the east.

In addition to the four courses, there will be a 42,100-square-foot resort clubhouse with views of the golf courses and surrounding mountainscapes.

Dr. Tom Climo, economic development director of the Paiute Indian Tribe, said the master plan calls for casinos, hotels and a 20,000-squarefoot smoke shop.

Johnny Pott is project director and director of golf. Landmark Golf is also involved in planning, development and management of Palm Springs Classic in Palm Springs, Calif; Paradise Ridge in Phoenix, Ariz.; The Plantation in Indio, Calif.; Circle T Ranch in Dallas; and Rancho Vistoso in Tucson, Ariz.



STRIKING THE BALL AT LIGHTNING

The Golf Club at Lightning W Ranch, Washoe Valley, Nev., designed by Robert Muir Graves, opened Oct. 1. The 18-hole, 7,200-yard par 72 layout includes extensive practice facilities and a 20,000 square foot clubhouse. It is the first equity private club in northern Nevada in four decades. Chris Thomson is the golf professional.



Dick Nugent at the site of one of his projects.

Dick Nugent: An anchor in heartland

Dick Nugent, 63, has been around golf courses his entire life. He was a caddy in 1940 and later worked on the maintenance crew at Bob-O-Link Golf Club in Highland Park, Ill. Robert Bruce Harris hired Nugent after the aspiring young architect graduated from the University of Illinois in 1958. Six years later, Nugent and Ken Killian opened their own firm. The pair designed dozens of courses together, including Kemper Lakes in Long Grove, Ill., before parting professionally in 1983. Nugent formed his own company, which includes son Tim and daughter-in-law Andrea. While widely known for his Chicagoland layouts, Nugent has expanded his reach worldwide, designing courses in Hawaii, Europe and elsewhere.

Golf Course News: What differentiates your company from other architectural firms?

Dick Nugent: I guess you'd have to look at our long-term record. We've been in the business 36 years and hopefully we've learned something along the way.

We are also one of the few firms that practice true construction management. We make sure the project stays on schedule, remains within budget and that moneys are spent properly. That's Tim and Andrea's area of expertise. Tim has a degree in engineering construction management and a master's in business administration. Andrea graduated number one in her industrial engineering class.

We put an on-site construction manager on every job. Dan Cunningham and Eric Wadsworth [Brent Wadsworth's son] are our project managers. Tim and Andrea oversee their work. GCN: How involved is Tim in the business?

DN: Tim is in the process of taking over the company. I'd like to always be around to meddle a bit, but we're moving toward a full partnership. I have a house in Phoenix. I'm there half the time and here [Long Grove] the other half.

GCN: You're considered one of the dominant architects in the Chicago market. Would you consider that your area?

DEVELOPMENT

VIOLA ADDS TOUCH Boca Woods remake complete

Woods Country Club has finished a two-year renovation program on its two courses and is reopening the North Course in November.

Under architect Lorrie A. Viola of L.A. Links in Farmington Hills, Mich., the North Course construction this summer reshaped and regrassed the greens with Tifdwarf Bermudagrass.

Superintendent John Gallagher and better pin placement."

BOCA RATON, Fla. - Boca and contractors Tifton Turf extended tees, replaced bunker sand and resurfaced the cart paths.

> The South Course facelift was done last year, the greens being rebuilt to U.S. Golf Association specifications and the bunkers being reshaped. Viola said the project added as much as 300 to 500 square feet per green, giving the members "more movement



The 335-yard, par-4 16th hole at Crystal Lake Golf Club in Lakeville, Minn., designed by Williams, Gill & Associates of River Falls, Wis.

Williams, Gill fashion Minn. centerpiece

Club Selection is Everything. The Kirby Marker System gives golfers a reason to select yours.

If you're still using stakes, sprinkler heads or fairway disks to mark yardage, you're missing a big opportunity -An opportunity to make the game more enjoyable for your golfers, and give them a reason to prefer your course. The Kirby Marker



System has been installed at hundreds of courses around the world, including the Pebble Beach Resort® Courses.

Golfers are universally delighted with the immediate and precise yardage distances that the System provides. Owners report time savings of up to 40 min. per round, resulting in increased revenue. Superintendents praise the collapsable design, which allows mowers to drive right over it.

Make the choice that makes a difference for you and your golfers. Call us today for a complete brochure.



6108 Avenida Encinas • Carlsbad, CA 92009 • 800.925.4729

CIRCLE #124



SHERMAN UTILITY STRUCTURES, INC. 2117 Magnolia Ave., South, P.O. Box 1926, Birmingham, AL 35201 205/252-6995 1-800-533-5103 FAX 205/322-4356

CIRCLE #125

CIRCLE #126

"It's a core-type course, with a majority of housing on the outside of the course," Gill said.

The course itself covers 140 acres of uplands and lowlands, featuring "stands of oak groves and quite a well-balanced diversity in terrain and vegetation," he said.

Ranging from one-quarter acre to three acres, the ponds serve as strategic elements as well as for water management and purity. All the runoff water from the streets flows through these lined ponds before funneling to Crystal Lake.

"Because of the topography of the property, several of the lakes on the front nine step down from higher to lower elevations," Gill said.

These ponds come into play on six holes, while North Creek flows through the property, influencing play on Nos. 2, 3 and 4.

Fox Meadow G&CC readied to open in summer of '95

MEDINA, Ohio — The golf course at Fox Meadow Golf & Country Club is scheduled to be completely seeded by mid-October, with play expected to commence in the summer of 1995.

By MARK LESLIE

Lakes Golf Estates here.

tees, according to Garrett Gill.

course to Golf Enterprises Inc.

LAKEVILLE, Minn. - Using nearly a dozen

ponds, a creek and dramatic natural features,

Williams, Gill and Associates has fashioned a

golf course that will be the centerpiece of Crystal

The par-71 track, which will open next spring,

The course was built by Glen Rehbein

Excavating - which constructed The Links at

North Fork in North Metro Minneapolis among

other courses - while the entire project was

planned and developed by Freeborn-Mower, Ltd.,

of Lakeville. Freeborn-Mower, which has built

300 houses in the community, is leasing the

will cover 5,200 to 6,500 yards over four sets of

The course, part of a 563-acre, upscale real-estate development, was designed by Burns Golf

Design, of Fernandina Beach, Fla. and built by Central Florida Turf, of Avon Park.

Fox Meadow is located on moderately rolling to hilly terrain. A 55-acre lake influences play on several holes. Number 13 is a 196yard par-3 playing from seven different tees located on or around

the big lake's dam to a wellprotected green. The green is set into an amphitheater, about 20 feet below the tees.

A unique feature at Fox Meadow is the three-level, 27,000square-foot putting green. From top to bottom, the green has about seven feet of elevation change.



BARRICADE[®] HERBICIDE PROVIDES RESULTS YOU CAN COUNT ON FROM THE FAIRWAY TO THE BOARDROOM. NOW THAT'S...

SECURITY

Job performance is judged on results not intentions. So it pays to use tools you can rely on. Like Barricade herbicide. Barricade gives you consistent, season-long control of crabgrass, goosegrass, and other grassy weeds. Even better, Barricade's prescribed rates deliver the precision timing you need to accurately determine its length of control. So you can overseed precisely when you need. Barricade is safe on turf and doesn't stain or leach out of the weed germination zone. And Barricade's lower active ingredient makes it easier on the environment. Barricade herbicide. The cost-effective turf management tool that makes you and your course look good. To

receive your FREE brochure and product label, call 1-800-435-TURF (8873).

ENGTH OF CONTROL OF CRABGRASS

Number Of Months 1 2 3 4 5 6 Barricade





Barricade Herbicide SEASON-LONG CONTROL THAT STOPS ON A DIME SANDOZ Read and follow label directions carefully. Barricade Herbicide is a registered trademark of Sandoz Ltd. © 1994 Sandoz Agro, Inc.

CIRCLE #128

Q&A with Dick Nugent

Continued from page 33

DN: Actually we're getting very international. We're working on a project in Croatia. We have contacts in Sweden, Austria and other parts of Europe.

People have asked us to look at projects in the Far East. Many of them are Japanese businessmen who have played our Hawaii courses [Minami Golf Club and Makalei Hawaii Country Club] and referred us to their contacts back home.

But Chicago has always been a very healthy market for us. It sits in the middle of the biggest agricultural area in the world. There's heavy industry and many universities.

And there's a very affluent segment as well as an extensive middle-income market. It's a diverse area, so there's always some segment on the rise. The Midwest in general also has more open, non-wetland sites than they have on the East or West coasts.

GCN: What is your design philosophy?

DN: I guess it would be to never lose sight of who your client really is - the golfer. Developers, resorts and municipalities all have their own goals and they must be factored into any design. But the end-user, the person who will actually play the course, is who you must keep in mind.

GCN: Who are your favorite old-time and contemporary architects?

DN: Alister Mackenzie, H.S. Colt and C.H. Alison are my favorite old-timers. Robert Trent

Jones, Dick Wilson and Pete Dye are the best among my contemporaries. During their time, each pushed the envelope of course design.

While I might appreciate Donald Ross' work, he did pretty traditional courses. The others pushed design to another level. Ross didn't do that.

GCN: Do you have a favorite course that you designed?

DN: Not really.

But I will say that people do their best work when they are challenged to come up with unique solutions. That's what you learn from. Our Hawaii

Replaceable, free-turning "knob" handles.

Patented agitator design rotates ball for complete cleaning. Hands and gloves stay dry.

Large opening in spiral agitator accommodates new. oversized balls.

> Easily accessible, tamper-resistant drain plug.



New design prevents towel clips from damaging hand finished baked

Compare the Rest. You're Looking at the Best.

Wherever golf is played, Superintendents and golfers alike recognize the quality, pride and craftsmanship that goes into every Par Aide ball washer.

So it's no surprise that more than a few imitators have come and gone over the years.

But, despite all of their "me too" claims, absolutely no one has yet equaled the unique advantages and rugged PAR

durability of Par Aide's cast aluminum original.

It was true in 1955. It's still true today. When it comes to ball washers, and the name of the company that stands behind them, Par Aide has no peers.

Ask your Dealer today about the best long-term investment value in golf course accessories - ask

to see all of Par Aide's "Classic" ball washers.

CIRCLE #129



courses are good examples.

At Minami, we had to deal with a tropical rain forest. There was no bottom to some of those mud holes. The ravines were 100 feet deep. We had to stabilize that ground and came out with a good golf course.

At Makalei on the Big Island of Hawaii, we had almost a desert landscape. There was no topsoil. So we created it by blasting up lava beds. We had to finesse the course into that site.

GCN: What are the major changes you've seen in course design over the past 36 years?

DN: The sites we're getting today are much less desirable than they used to be. They have more problems and call for more creative solutions.

Fairway irrigation is another thing. If a course had it 30 years ago, it advertised the fact. Now it's commonplace.

The acceptance of USGA [U.S. Golf Association] putting greens has gotten rid of the old 1-to-1to-1 mystery mix. We used to make mud pies with different kinds of sand, top soil and organic mix, dry them in the oven, and then pour water over them to see which ones would absorb water and which ones fell apart. It was a lot less scientific.

Grasses have changed dramatically, too, with all the USGA and turf company research. It used to be that Bermuda was Bermuda was Bermuda. Now there are many different varieties for different applications.

GCN: Do people still ask why you and Ken Killian dissolved your partnership?

DN: Just in interviews. We're still best friends. We were kibitzing just a couple of days ago. Basically, we split because he was doing more stuff on the West Coast and I was concentrating on the Midwest. He married a woman from California and they liked spending more time out there.

We both feel strongly about the people who used to work for us - Bob Lohmann, Jeff Brauer, Bruce Borland, Jim Blaukovitch. We've been very lucky to have some good people here.

GCN: Do you foresee new course development continuing at its current pace?

DN: Yes. The industry has several things going for it. Demographically, baby boomers are getting older, moving away from more active sports and toward golf.

We benefited when real estate was hot in the 1980s. Things have cooled off the past few years But real estate is cyclical.

Then there are taxes and inflation. Golf courses should be viewed as a long-term investment and a hedge against those two things.

The industry should remain stable for the next five to 10 years. And alternative facilities, like ranges and short courses. should grow considerably.


WHEN IT'S TIME TO OVERSEED, BARRICADE®'S SEASON-LONG CONTROL STOPS ON A DIME. NOW THAT'S...

CONFIDENCE

Yours is a precision business. So you need turf management tools that give you predictable results. Like Barricade herbicide. A single early application of Barricade provides consistent seasonlong control of crabgrass, goosegrass, and other tough weeds. And when you're ready to reseed - no problem. That's because Barricade's prescribed rates deliver the precision timing you need to accurately determine its length of control. Its low solubility keeps it near the surface, in the weed germination zone, and away from developing roots. And Barricade's low active ingredient makes it easier on the environment. What's more, Barricade eliminates the concern for staining. Barricade herbicide. Cost-effective performance that builds

confidence. To receive your **FREE** brochure and product label, call **1-800-435-TURF** (8873).





Barricade Herbicide SEASON-LONG CONTROL THAT STOPS ON A DIME

SANDOZ Read and follow label directions carefully. Barricade Herbicide is a registered trademark of Sandoz Ltd. © 1994 Sandoz Agro, Inc.

Ex-super architects' lament: 'Please maintain integrity of my design'

By MARK LESLIE

Sometimes mixing the two jobs of superintendent and architect can be a bad idea, especially in regard to design integrity.

Architects who were once superintendents have an idea what supers should not do.

"It is rare that our bunkers are the same six or 12 months down the road [after a course opens]," said Keith Foster, an exsuperintendent who now operates a design business out of offices in St. Louis, Mo., and Phoenix, Ariz.

He recalled how he had destroyed those two holes in his superintendent days. "There was a long par-4. I'm a good player, and I felt the hole needed a bunker directly in front of the green. I made that my mission because I didn't think the hole was tough enough. I ruined the hole. Years later, when I knew what I was doing, I went back to the club and convinced them to fill the bunker back in."

Tree programs are another example of something that sounds good, but can be a detriment. Since many clubs and members appreciate trees, Foster said, they give their superintendents money for tree programs. "Many times, the trees are okay. But what happens when the trees aren't properly placed?" he asked. "I think they should be more cautious about maintaining the integrity of the golf course."

Care of greens is a major problem, superintendentsturned-architects said. To avoid complaints by membership and players about scalping along the edges of greens, crews tend to overcompensate in mowing and cut the green smaller, according to Jan Beljan of Tom Fazio Golf Course Designers, Inc. "An eighth inch daily, day after day, and at year's end the green is six inches smaller," she said. For this reason, many owners are now deciding to have wire placed around the perimeter of the green during construction, "so you will always know how far out the green should extend."

Michael Hurdzan of Columbus, Ohio, alluded to this "subconsious effort that causes greens to shrink. Now that these greens are smaller, clubs have placed new irrigation on the edge of the greens and we can't take them back out beyond the heads to where they should be."

Hurdzan added that where people have improperly built the edge of a green — where it interfaces with surrounding soils — the most common symptom is dryness on the next two to three feet. "When the superintendent can't get grass to grow on a short cut, he will often raise the cut to compensate for the bad interface. So you have **Continued on next page**



Tips from toiling in both positions

.....

Having toiled both on the equipment and at the draftsman's table, what tips do the superintendents-turneddesigners have to pass on?

• Trees: "Keep trees back from the surfaces of greens," said Snyder. "And if you're in an area where you have winter frost, do not plant on the east side of greens and tees, so that the sun hits it."

• Bunkers: "Watch that the slope is not too steep," Snyder said. "Make them big enough so that you can handle them with a machine. Also, allow the golfer a way to walk out of the trap.

"I like to have my traps and mounds fit in as a unit with the green. The shape of the green should match the outline of the sand trap and mounding. Then you have enough space between the edge of the green and sand trap so you can turn a triplex around."

• Greens: "There should be at least several areas on a green where you can put a pin," Snyder said. "I'm not against steep slopes on a green except when you're having difficulty in a change of slope."

On using USGA-spec greens in the desert, Snyer said: "I'm against spending all that money for something you don't need here... We've found that the more sand we use the better off we are."

• Grasses: "If anything," Hurdzan said, "avoid planting the wrong grass in the wrong microclimate. Don't plant Bermudagrass where it won't grow, or bentgrass where it won't grow."

• Drainage: Primary concerns for superintendents and architects are irrigation and drainage.

"Normally, we drain water off greens in at least two directions," Snyder said, "But dump as little off the front as possible because that's where the fairway mower comes up and where most golfers walk onto the green."

Once a super... Continued from page 33

course design business. As an example of the lack of priority some architects give course maintenance, he pointed to a project that was designed without a maintenance building.

"They had to take out two prime house lots for that building, after the fact," he said. How has turfgrass education

helped this clutch of architects? "I think it's quite important," Snyder said. "The experience I

had as a kid working on a golf course and doing all the nasty

jobs around a place — cleaning the sand traps on the course and the grease traps in the clubhouse -all helped prepare me for this." Some of the lessons:

· Snyder's Law, according to Jack, is "there are slopes beyond which you should not design.

"Look at the Flymo work that's being done on steep slopes," Snyder added. "It's not reasonable, or practical, and it has caused a lot of problems at lots of courses that are just not maintainable - or if they are, you do it by hand, and what does that cost you?"

• "A lot of designers may have worked on a course or caddied,"

said Beljan, "but I spent years growing up riding all the maintenance equipment. And when you're out there yourself, dawn to dark, and know what the equipment can and can not do, you design accordingly."

Many advances in equipment over the last 20 years have made a difference in both turfgrass maintenance and design, she said, including new grasses for greens and those steeper slopes Snyder spoke of: Flymos and weed-eaters for hard-to-get-to places; and irrigation systems with heads around greens that help avoid over-watering.

• Foster's training has led him to "always look, not at what I shouldn't do but what I should do: positive drainage, surface drainage, air circulation around greens - all the things that allow a superintendent to do his job. What an architect can do is design something that is impossible to maintain, like place a green in a valley surrounded by trees. That was done for many years."

• "To me," said Hurdzan. "my background has been the greatest help in being able to deal with superintendents at a peer level, to break from the norm in the kinds of grasses and fertilizers we use and the kinds of greens we build, and to deal with environmentalists.'

He added that architects without a background in turfgrass management are at a disadvantage "when dealing with an environmental hearing or group and having to justify why golf courses are good neighbors to the environment. Those of us who have that background are able to speak forcefully about it because we have used those materials, and understand all the ramifications and interactions of turfgrass management and, more importantly, how to avoid problems and implement Integrated Plant Management."

Yet, Hurdzan tempers help-thesuper talk with the admonishment that golf designers are in the entertainment business."I look at us as being in the entertainment business and we're trying to sell value to the golfer," he said. "We want the golfer to come to our golf course, give us 4-1/2 to 5 hours of his time and \$30 to \$50 of his money and walk away saying, 'God, that was worth it.' So, what I think personally [about design], and what I think for a golf course to be profitable and for a golfer to feel like he has gotten the value out of a project, may clash.

"If you're trying to make golfers happy - I don't care how difficult a feature is for the superintendent — it should be in there. I'm not a big fan of flowers, as an example. But if that makes people choose one course over another, put them in there. They can help tee complexes. You may have to hire a horticulturist, but that could be the difference between success and failure in some places."

Yet, like his colleagues, Hurdzan maintains a healthy respect for the needs and desires of superintendents.

"I don't think many superintendents try to cross over and do what I do," he said. "I find supers recognize the professional relationship we have. They know more about growing greens to the level of perfection golfers want, and they recognize I know how to build a golf course to how the owner wants it. That's a neat equilateral triangle between the three of us. I defer to the superintendent in technical matters. And he defers in matters I should know about."

Maintain integrity

Continued from previous page a conscious decision to make the greens smaller," he said.

"One other thing is where we have a bluegrass collar and bentgrass green, a green chairman will decide he wants a bentgrass collar. So they start mowing in on the green for a bentgrass collar. That also makes the green too small."

"Superintendents, for better or worse, have a major impact on golf course design," Foster said.

All agree the good impact can far outweigh the bad, especially if the superintendent is brought aboard a project early.

BENTGRASS

Good news travels fast. Especially when it comes from internationally recognized professionals.

That's why demanding superintendents worldwide are using and endorsing the creeping bentgrasses *Providence (SR 1019), SR 1020, or Dominant™ (a blend of the two).



Of course, that doesn't come as any surprise to us. Because we've spent the past several years developing and testing our cultivars on golf courses and at universities with incredible results.

The unanimous conclusion? Every aspect of our bentgrasses is superior to all other commercially available varieties. Color. Texture. Density. Disease resistance.

Heat and drought tolerance. What's equally important is our bentgrasses' performance under varied golf course condi-

tions. From America to Australia to Africa, our cultivars consistently produce beautiful, finetextured greens with true putting quality and reduced maintenance. And outstanding fairway turf with less thatch and excellent wear tolerance. These features are important to superintendents, golfers, architects, and greens committees alike.

Don't just take our word for it. Contact your nearest Bentgrass Marketing Group member today for more information and university test results. And be prepared to put your course on the map.

*Providence and SR 1020 are protected under the U.S. Plant Variety Protection Act.



P.O. Box 1416 · Corvallis, OR 97339, USA Telephone: 1-800-253-5766 * Fax: 1-503-758-5305

CIRCLE #131

For Additional Information

Agra Turf Searcy, AR • (501) 268-7036

Agriturf, Inc. Hatfield, MA • (413) 247-5687

Andersen Turf Supply, Inc. Huntington Beach, CA • (714) 897-0202

Arkansas Valley Seed Co. Denver, CO • (303) 320-7500

Automatic Rain Company Menlo Park, CA • (415) 323-5161

Arthur Clesen, Inc. Wheeling, IL • (708) 537-2177

Germain's Fresno, CA • (800) 688-8873

Indiana Seed Co. Noblesville, IN • (800) 562-2459

Professional Turf Center, Inc. Tigard, OR • (800) 894-7333

Professional Turf Specialties, Inc. St. Charles, MO • (800) 369-3881

Proseed Turf Supply, Inc. Chantilly, VA • (800) 753-7333

Royal Seeds, Inc. Kansas City, MO • (800) 753-0990

Seacoast Laboratories, Inc. Dayton, NJ • (800) 522-4769

Seed Research of California Sacramento, CA • (916) 349-8617

Seed Research of Texas Dallas, TX • (214) 350-2672

Smith Turf & Irrigation Co. Charlotte, NC • (704) 393-887

Sweency Seed Company King of Prussia, PA • (800) 544-7311

Turf & Garden Chesapeake, VA • (804) 543-2071

Walker Supply Inc. Pittsburgh, PA • (412) 561-9055 FOREIGN GROUP MEMBERS

Agrico Sales Ltd. Delta, B.C. • (604) 940-0290

Kenko Commerce & Co., Ltd. Chiyoda-ku, Tokyo, Japan (03) 3258-8061

Rothwell Seeds Ltd. Lindsay, Ontario • (705) 324-9591

Builder, beware what you're buying

Continued from page 1

labs have been left trembling in financial fear. The entire golf industry is taking steps to curb faulty construction. Early and frequent soil testing is key.

"It's prudent and the industry has not been doing it, and it is catching up with them," said Steve MacWilliams, vice president of Turf Diagnostics and Design in Olathe, Kan. "It's almost negligent if you don't do quality control. Architects are making out checks with their clients' money. Whether they feel they have the best supplier in the world and they are working with all top-quality companies, they still have to do it.

"It's not a reflection on anyone in the process as much as that Murphy's Law dictates."

"All the major architects are testing [materials]," said architect and builder Rees Jones.

Perhaps none are testing as meticulously as Bob Cupp, whose staff agronomist, Billy Fuller, sees that every truckload of sand is perc-tested and full soil tests run throughout a project.

Obtaining material that meets rigid specifications should not be difficult, especially with the recent growth of specialized soil blending companies.

"We're not talking 'art' here," Cupp said. "We're talking hightech soil blending. And we're just barely approaching the same types of consistency requirements as the AIA [American Institute of Architecture] specifies for structural support."

Inconsistency is usually the fault of the sand supplier, Cupp said. "Normally speaking, it's a loose operation that some sandpit owner delivers. Now, thanks to litigation, the contractors know it had better be right."

That the delivered sand differs from preliminary lab tests, and even from one truckload to the next, can be attributed to nature and to the fact the supplier may be working in a different spot than when he provided the sample to the lab.

"There are a lot of reasons for a change in the sand," said architect Michael Hurdzan of Columbus, Ohio. "Sand changes in the vein. The washing operations may be done differently. The shaker apparatus may wear out or not be as efficient.

"Also, we order 10,000 or 12,000 tons of sand for an 18-hole golf course. As long as a pit is meeting specs for big contractors, a lot of them [suppliers] are not going to worry about us little guys."

Hurdzan also pointed to the addition of organic matter to sand as "multiplying the potential for complications. Organic matter is even more variable — in weight, moisture, carbon-nitrogen ratio, amount of organic matter to ash, even the decomposition state of it," he said. "All of that influences the performance properties... Peat actually decomposes in the mix pile. If it sits in the pile for a month or two, it may change from 80-20 [sand-to-peat blend] to 90-10 or 92-8."

Watkins slammed home the quality-control discrepancy. "Sports field owners and architects are much, much more demanding and technical and expect a whole lot more than nearly all golf courses," he said.

Who performs quality control varies from job to job. It can be a Hummel or Watkins. The developer can hire a maintenance superintendent to control such tests. The contractor can depend on labs alone to check root-zone materials. Blenders should test the mix at intervals throughout a work day.

Watkins suggested testing all sand before peat or other organic matter is added. MacWilliams recommended checking the sandpit itself "because you don't have back-haul considerations." "Contractors should work with

a lab in the mix development — in Continued on next page

QC cost minimal in overall scheme

What does a quality-control program cost? "Typically, the average cost for one hole is \$15,000, including irrigation, dirt work, etc.," said Glen Watkins, president of Root Zone Mix. "So \$15,000 times 18 or 19 holes equals quite a bit of money. The cost to know you're getting what you're supposed to be getting is insignificant." A quality-control person costs about \$1 per ton for mix, he said. Turf Diagnostics and Design's Steve MacWilliams said testing — to confirm sand fractions and organic content of the mix — costs \$115 per sample for every 1,000 tons. Assuming 10,000 to 12,000 tons of sand for a golf course, that equals \$1,500 to \$2,000, he said, or 2-1/2 cents per square foot on the green.

Saying he has known instances when bad materials were delivered "inadvertently, but never intentionally," Wadsworth Golf Construction Co. President Paul Eldredge said: "It's a major problem if it happens, because it costs a couple hundred thousand dollars. That once when it does happen is the one everybody talks about. It's like the murder down the street."



The charge of Hannibal from Spain over the Alps into Italy set off a series of crushing defeats on Roman armies. Elephants helped power Hannibal's army over treacherous mountain terrain.

218 B.C.



The Charge of the Light Brigade during the Crimean War checked Russia's ambitions in Eastern Europe. The battle was immortalized by Alfred Lord Tennyson in the poem, "The Charge of the Light Brigade."

1854

Charges that changed



The next historic charge is up to you. Lead it on your golf course with the allelectric E-Plex[™] greens mower. The revolutionary E-Plex operates emissions free and noise free. Say goodbye to turf damage due to hydraulic leaks. To complaints about noise. To pollution. To costly maintenance and repairs.

What do you sacrifice to enjoy all the benefits of the latest technology? Absolutely nothing. The E-Plex provides an exceptional quality of cut, maneuverability and performance*. You can actually increase your revenue with the E-Plex. Because you can mow earlier, you can start tee times earlier for additional rounds of golf.

4301 Ransomes America Corporation, 900 North 21st Street, P.O. Box 82409, Lincoln, NE 68501-2409 @ Ransomes America Corporation 1994. All rights reserved.

All precautions said lost if top dressing inconsistent with root zone

By MARK LESLIE

The green is built to U.S. Golf Association (USGA) specifications. The root-zone mix is perfect. The turfgrass is looking exceptional. All is rosy with the world, right? Well, not necessarily.

"The biggest problem right now with USGA greens is when superintendents don't use the absolute — and I mean absolute — same material in their top dressing process for the years to come," said architect Rees Jones. "I'm not talking material someone says is 'almost the same.' I'm talking about the exact same source."

Jones decried the practice of superintendents to use the same sand suppliers they have always used simply because they trust them.

"This happens all the time," he said. "Huge mistakes are made a lot. These suppliers don't change their mix from course to course. They're not specifically customizing top dressing for each course, as we have specifically customized it for each course."

Top dressing greens with a blend that does not comply with the root-zone mix "can create a new perch water table that chokes off everything we've done," Jones said.

"Ideally, you top dress with what you build the greens with," agreed Steve MacWilliams, vice president of Turf Diagnostics and Design in Olathe, Kan. "The primary rule is: Don't top dress with a finer material, which would layer out the green in the top two to three inches. You can go in with coarser sand."

The superintendent should go to the trouble of getting the sand and mixing it himself, Jones said, suggesting it is a good idea to purchase a small blending machine.

MacWilliams passed on some tips concerning top dressing materials:

• When top dressing is delivered, bag a portion of it and store it away. It may come in

handy if there are turf problems and you want to see if the problem was the top dressing.

• If superintendents are communicating with their associations and a sand company starts delivering bad product, the association can go to the supplier and lay down the law.

• If superintendents makes it known they are quality-controlling their top dressing, the supplier knows it must supply good material.

...

In addition to stressing a compatible top dressing blend, Jones said, "Superintendents have to change their watering practices on USGA greens.

"They need to be flushed by heavy watering and then not watering, rather than lightly watering all the time. The biggest mistake I see is a superintendent lightly watering them. That water stays on the top. The roots come up to the top. And you start developing a sick thatch that you have to keep aerifying out."

Builder beware!

Continued from previous page deciding the best mix," Hummel said. "What is mixed by hand in the lab differs from what you get in the field where they might be running the materials through screw augers or belts to mix them. I suggest the blender run a couple of calibrations to come close to what was developed in the lab.

"After the machine is properly calibrated, it should be tested every 1,000 tons. The test would entail basically the organic matter to make sure it is being metered in proper proportions and sand size. If something is off, and that is not unusual (especially the percentage of organic matter), put a hold on that stockpile until a complete physical analysis is run on it."

Watkins tests the blend every hour on site.

Other suggested cures for the root-zone material problem:

• Pre-qualify the material before it goes to bid to the contractor, said Mike Pierce, president of Dakota Peat.

• "Never let a blending company purchase the materials," Watkins said. "It puts a person in a compromising position if they are furnishing the materials."

• Make sure the lab being used is competent in dealing with soils.

• Developers should reserve the right to see all tests and information pertaining to a project, since more and more contractors have a code-of-ethics agreement that no one can see test results except the person who paid for them, Pierce added. Their contract should give them the right to require proof of purchase on the sand and peat moss, and verify it by going directly to the mining company or manufacturer to inspect all documentation.

November 1994 41



The charge card changed the way consumers purchased goods and services. Two of the largest banks introduced the first bank credit cards.

1958





Charge ahead by sending for a free video on the E-Plex. Just call 1-800-228-4444.

The E-Plex is a showcase of contemporary engineering, leading the industry into the twenty-first century. This innovative machine was born out of Cushman's four decades of experience with electric vehicles and Ransomes expertise with reel mowers.

The E-Plex is the herald of a new era in turf maintenance. Harness its energy for benefits that were unheard of but a few years ago. Charge ahead with the E-Plex!

the first all-electric triplex greens mower. This technology will change

forever the way golf courses are maintained.

1994

For a free demonstration call **1-800-228-4444**. We'll give you the name and location of the nearest dealer. FAX (402) 474-8522.

* Covers 9 to 18 holes on one full charge depending on terrain.



Nicklaus, Desert Mountain hook up on 4th course

FROM THE LEADER BOARD

"Palmer's Aviara course is a masterpiece of beauty and function

It truly is, as Golf Magazine says, 'One of the ten best new resort

TO THE DRAWING BOARD

SCOTTSDALE, Ariz. — Construction has begun on Jack Nicklaus' fourth signature golf course at Desert Mountain, a private residential and recreational community here. When Nicklaus hits the inaugural drive to the planned 18th green, Desert Mountain will become only golf community in the world to boast of four Nicklausdesigned championship courses, joining Renegade, Cochise and Geronimo courses.

"Not only will we have four Nicklaus courses, we will have four completely different golf experiences," said Dick Neyrey, president of Desert Mountain Properties.

"This will be our friendliest course. Not any less challenging than the other three, but wider,

courses in the U.S.' "

Larry Clemens

Vice President

General Manager

Hillman Properties

so a bit friendlier. With Renegade's dual in placement, Cochise's target layout, and Geronimo's dramatic elevation changes, we already offer a full range of golf options for our members. The fourth course adds yet another golf experience:.

The site of the fourth course is approximately 3,000 feet above sea level on the east side of the development. Similar in character to authentic Scottish links, a Nicklaus objective is to incorporate as much grass-to-grass transition area (tees to fairways and fairways to greens) as possible, given the topographical challenges of the natural desert. The course is planned for completion in late 1995 or early 1996.

GCSAA targets members from public-access courses

Continued from page 1

er.Ed

percent of the record 1,360 golf courses opened for play were public-access.

By the same token, private clubs account for no more than 34 percent of the 14,648 golf facilities now operating in the United States, according to the National Golf Foundation. NGF figures also show the number of private clubs to be falling — by seven percent over the past five years; from 5,232 in 1990 to 4,915 in '93.

"The association has, in the main, been a private association with membership from the private clubs," O'Brien continued. "It's an overall goal of the association to attract and maintain membership. And we plan on fulfilling that goal."

O'Brien explained the Public Golf Resource Group is an ad hoc committee with no formal standing position within GCSAA. Its findings must first be presented to and approved by the GCSAA board of directors before action may be taken.

"We're going to examine what the special needs of a superintendent at a public golf course might be — in their employment as well as what public courses might need as an organization," he said. "In other words, we don't want to approach the public superintendent saying, 'Here's what we have to sell.'

"Rather, it's 'What do you need that we could deliver more effectively?' "

...

One week before the Public Golf Resource Group met, in late September, representatives of more than 70 golf course superintendent associations gathered here in Lawrence to share their ideas and views with members of the GCSAA board of directors and the Chapter Relations Planning Resource Group.

GCSAA has formed a new Chapter Relations Department, managed by Donn Bretthauer. The September meeting served to create an agenda for this new department, said O'Brien, who explained that various GCSAA chapters will also play a major role in the expanding national membership.

"Because it's nearly always the case that chapters have more members than the national, it makes sense," said O'Brien, who spent many years with the Professional Golfers Association of America, prior to joining GCSAA early this year.

"I was surprised that an association with as many chapters as we have — and with those chapters doing as many important things as they do was not dealing with them more officially. It's normally the case that large associations have chapter relation departments. It was visible here by its absence.

"One of the major changes here is the view of national serving as a resource to the chapters... Chapters are a foundation of this organization. They really are."



GOLF COURSE NEWS

BRIEFS



CLUBCORP BUYS 2 TEXAS LAYOUTS

DALLAS — GolfCorp has assumed management of two Texas courses, The Golf Club at Fossil Creek in Fort Worth and Padre Isles Country Club in Corpus Christi. ClubCorp acquired Fossil Creek from Hunt Resources and turned operation of the Arnold Palmerdesigned course over to GolfCorp. ClubCorp purchased Padre Isles from Texas-based Asset Development Corp. Architect Bruce Litrell designed the 18-hole course.

GOLF COMMUNITIES ADDS FLA. TRACK

ORLANDO, Fla. - Golf Communities USA Ltd. has entered an option agreement to purchase Cutter Sound Golf & Yacht Club in south Florida's Martin County. Golf Communities took over operation of the entire project Sept. 16. In addition to the Gary Playerdesigned championship course, Cutter Sound includes 96 deep-water boat slips and 200 homesites

FOX VALLEY UNDER PALOMA WING

LANCASTER, N.Y. - Paloma Golf Group Inc. recently purchased The Fox Valley Club here for \$4.6 million. The 18-hole layout is located near the Buffalo airport and 30 minutes from Tan Tara Golf Club, which Paloma purchased earlier this year. Paloma founder Garth Chambers also operates Emerald Valley Golf Club in Eugene, Ore., and Dove Canyon Country Club in Southern California.

LAKE LINDERO NAMES NEW MANAGER

AGOURA HILLS, Calif. - Lake Lindero Country Club here has named Golf Projects Lindero, formed by Golf Projects International President David Smith, to manage and operate the club. Lake Lindero features a nine-hole executive course, tennis courts, swimming pool, sailing lake, lounge, snack bar and pro shop.

AOKI TABS WESTERN GOLF

SCOTTSDALE, Ariz. - Aoki Corp. of Japan has selected Western Golf Properties to provide golf club development and management consulting services for Caesars Park Beach and Golf Resort located in Cancun, Mexico. Westin Hotels & Resorts will manage the property, which includes an 18hole course designed by Aoki.

MEMBERS BUY INDIAN WELLS CC

INDIAN WELLS, Calif. - The partnership of 319 club members and ClubCorp has completed the \$17.25 million purchase of Indian Wells Country Club from the U.S. Customs Service. The 27-hole course, which has long been a site of the Bob Hope Chrysler Classic, will remain private. MARKETING IDEA OF THE MONTH

Nev. firm takes resort promos to the highway By PETER BLAIS

RENO, Nevada - A Nevada firm is taking resort promotion on the road to attract "discriminating" golfers to some of the world's premier golf destinations.

Golf Resorts Inc.'s 53-foot, custom-designed marketing vehicle made its premier appearance recently at Newport (Calif.) Beach Country Club. The event kicked off this fall's three-month, nationwide trek to demonstrate the vehicle's capabilities to resort directors.

The goal is to recruit 60 resort advertisers to be showcased during the 1995 exhibition promotional tour schedule. That schedule will take the custom-designed vehicle on a 12-month excursion to professional golf tournaments, major cities and busy golf locations.

"It's a new advertising medium aimed at a select group," said Golf Resorts representative Nancy Dillman. "It allows resorts to target golf travelers. Normally,



Golf Resorts Inc.'s 53-foot vehicle will tour the country promoting numerous golf resorts.

they'd have to spend a lot of money advertising in numerous publications to reach those people."

According to company literature, the Double Eagle, as it is called, will reach more than 500,000 of golf's most-affluent vacationers.

"By delivering a message in a manner that's up close and personal to a prime target market, resorts will find the unique medium an affordable and innovative alternative to conventional sales and advertising methods," the company states.

A truck pulls the 53-foot Double Eagle

van. Graphics identifying various resorts and companies are displayed on the van's sides. Once situated, one side of the van opens revealing its most intriguing feature, a high-tech golf simulator and viewing area.

The simulator allows visitors to play a hole on one of several widely known courses. Promoters expect this to attract many people who will either play a hole for a nominal fee or watch from the viewing area. Contributions raised from the simulator will be split between the Ameri-Continued on page 44



Doral Resort is one of the premier properties owned and operated by KSL

KSL solidifying position as major golf resort operator

By PETER BLAIS

Like a powerful army that has gained a foothold in a new country, KSL Recreation Corp. is moving up its forces and digging in for a long occupation of the golf industry.

A week after purchasing LaQuinta Resort and Club and PGA West in Palm Springs, Calif., for \$256 million last January, KSL agreed to buy The Doral Resort & Club in Miami.

Suddenly, the Kohlberg Kravis Roberts & Co. affiliate was in control of two of golf's premier properties.

Since January's invasion, KSL has moved in seasoned officers to oversee its multiple golf resort operations.

The most recent lieutenant to arrive is Virgil Robinson. The former director of agronomy at the renowned Desert Mountain Properties in Scottsdale, Ariz., assumed the same position at LaQuinta Resort and Club and PGA West on Nov. 2.

Robinson, a 28-year course management veteran, will join Dick Kopplin, a 22-year country club manager who this summer left Desert Mountain to become vice president of club opera-Continued on page 45

Anaheim chooses to operate own courses

By PETER BLAIS

ANAHEIM, Calif. - The City Council recently rejected American Golf Corp.'s proposal to assume operation of the city's H.G. Dad Miller and Anaheim Hills municipal golf courses.

The idea had split the council down the middle, with Mayor Tom Daly and Councilmen Irv Pickler and Frank Feldhaus originally favoring the privatization plan.

Councilmen Fred Hunter and Bob Simpson opposed the plan, believing the city should retain control of the courses and protect municipal employee jobs.

It wasn't until a cost analysis performed by the firm KPMG Peat Marwick Management Consultants revealed the switch could result in minimal savings that the council decided to leave the course in the hands of municipal employees.

[A call to American Golf Corp. offices for comment was not returned.]

'The Council realized we were running a good operation that was making money

'The Council realized we were running a good operation that was making money for the city.'

- Jack Kudron, Superintendent of Parks

for the city," said Superintendent of Parks and Golf Jack Kudron. "We were able to convince them that we could make as much money as a private operation. That was a relief to Sharon Ericson, president of the 750-member Anaheim Municipal Employees Association.

'The Council rejected it because it was pointed out again and again that the courses were already making a lot of money for the city and were in great shape." she said.

"There was no public support for the plan. AGC supporters weren't showing up for meetings. There were even peti-

Course owners hold trade show

ORLANDO, Fla. - The National Golf Course Owners Association will hold its first trade show for course owners and operators in conjunction with its annual conference here on Jan. 23-24.

Attendees at the conference and show will participate in educational sessions and attend a limited trade show geared specifically to the interests of owners.

More than 300 course owners are expected to attend the annual conference, which will continue through Jan. 26 with educational sessions on such topics as construction, financing and marketing.

'The NGCOA Trade Show will offer the opportunity for our mem-

Continued on page 45

Golf Resorts

Continued from page 43

can Junior Golf Association and a charity designated by the tournament sponsor.

The simulator should get tournament visitors in the door, Dillman said. Once inside they will stroll past a variety of displays, exhibits, presentations and product samples showcasing the 60 participating resorts as well as various golf product and service companies.

"We've targeted more than 140 resorts throughout the United States, Mexico and the Carib-
bean as potential advertisers,"a compDillman said.The na
be made"We expect to sign up 60 fairlyticipati

quickly this fall." For the \$1,400 per month advertising fee, resorts will be included in a colorful promotional brochure highlighting each of the resorts. The facilities will also be featured in framed wood cases within the vehicle.

Seven travel consultants will accompany the vehicle and provide visitors with additional resort information.

Golf Resorts Inc. will maintain

a computer database of visitors. The names and addresses will be made available to each participating resort.

The Pro Lounge located at the front of the vehicle features leather seating, wood cabinetry, television, VCR, CD player and refreshment area. The private facility will be used for small meetings, media events and sales opportunities for participating resorts.

Other benefits for resorts include the ability to have one's own sales personnel in attendance to entertain guests and prospective clients; exposure at select travel trade shows; an area to distribute brochures or literature; and 25-inch color monitors to show resort sales and promotional videos.

Oliver "Bud" Andress developed the Double Eagle concept. The Golf Resorts Inc. president has extensive travel-industry experience, having created the Hawaii Travel Academy, a travelagent training seminar. He also produced Hawaii on Tour, a mobile attraction that visited more than 300 U.S. cities promoting the Aloha State. The rest of the executive team includes Chairman Ben Dolson, a 35-year sales and marketing executive; Vice President Paul Greubel, an entrepreneur who has helped capitalize and start various businesses; and Vice President Fred Keneer, a former golf course professional who has hosted travel television shows and operated a pair of retail travel agencies.

For more information, write Golf Resorts Inc., 1325 Airmotive Way, Suite 175H, Reno, NV 89502; or telephone 702-786-5959.

Anaheim

Continued from page 43

tion drives by golfers demanding that the courses remain under city control."

So why did the mayor and two councilors continue to push the privatization idea? According to Ericson, all three received campaign contributions from AGC. During one public hearing, AGC handed a woman running for the council a prepared speech to read supporting the privatization plan, Ericson added.

Kudron would only say that the debate was very political and involved lobbyists as well as campaign contributions. Ericson conceded employees at municipal golf courses often worry about private management firms taking over and cutting jobs, pay and benefits.

AGC had agreed to retain all course employees and assign them to company-run courses within a 50-mile radius of Anaheim, Kudron said. Pay would have basically remained the same, although benefits would have been inferior to those the city provides, he added.

"For city employees, it was an emotional issue," Kudron said. "But keeping them on the city payroll didn't play a major part in our decision. We looked at this as the best business move."

According to Kudron, the KPMG study showed AGC's offer would guarantee the city \$1.6 million annually for 20 years.

"Last year, we made \$1.7 million," he said. "So we were more than competitive. Under the AGC plan, two-thirds of any new revenue would have gone to AGC and just a third to the city. Now, the city keeps all new revenue. The final decision came down to the city wanting to keep control."

Added Ericson: "It may make sense for private firms to take over when a course is losing money or not being taken care of properly. But it turned out the dollars and cents just weren't there to justify it in this case."

"I can see where management companies do work just down the road in Long Beach," Kudron said. "The city was losing money at its five courses. AGC came in and now the city is happy and AGC is happy. They've improved that situation substantially."



Particle distribution pattern for typical blended product.

For maximum you need the finest par

SCOTTS, fertilizer-based pendimethalin products are the most widely used preemergent combinations. And for three very fine reasons.

The particles are smaller and more consistently sized than typical competitive physical blends, reducing segregation potential while providing up to 8 times the coverage per square inch. That better coverage means fewer application breaks with more effective control of grassy and broadleaf weeds. Field tests show that poorly formulated combination products may sacrifice preemergent weed control by up to 15% or more.

No other preemergent herbicide can match pendimethalin's combination of broad spectrum weed control, control effectiveness and season-long performance.

	P	reemerg	ent Cor	ntrol Com	parison			
and and sentimets the plan.	Crabgrass	Goosegrass	Foxtail	Poa Annua	Oxalis	Spurge	Henbit	Chickweed
pendimethalin	H	H	H	M	H	М	H	H
prodiamine (Barricade)*	H	M	Н	M	М	М	M	M
dithiopyr (Dimension)*	Н	M	Η	M	H	М	M	M

H-High M - Medium (Based on Scotts/university data)

* Barricade and Dimension are trademarks of Sandoz Limited and Monsanto Company respectively.

KSL digs in

Continued from page 43

tions at LaQuinta and PGA West. "We really want to have the top products in the golf industry," Kopplin said. "Virgil is the kind of person who can help us take that next step."

Kopplin and Robinson will oversee upgrades, changes and additions to the three LaQuinta and four-soon-to-be-five PGA West courses, including:

• construction of the new Tom Weiskopf-designed Private Course at PGA West scheduled to get underway this fall and to be ready for play a year later;sand bunker restoration to

the four PGA West layouts; • installation of a new irrigation system and cart paths on the La Quinta Mountain Course; • privatization of the La Quinta Citrus Course.

KSL officially took over management and operations of Doral on May 20 and immediately named 25-year hospitality industry veteran Hans Turnovsky general manager. Turnovsky most recently was general manager of the Phoenician Resort in Scottsdale. Turnovsky appointed Randy Cahall director of golf. The University of Cincinnati graduate will oversee the four championship courses (including the famed Blue Monster Course) and anine-hole, executive-length layout. Cahall will work closely with superintendent Pat McHugh (a featured speaker at November's Golf Course Expo), who was named to his post earlier this year.

One of the biggest challenges for Cahall and McHugh will be riding herd on the course renovations planned as part of a \$17 million renovation to the 650acre property

Work will begin next April on the Blue Monster, home of the Doral-Ryder Open. The program includes regrassing greens and fairways, bringing outdated bunkers back into play and installing a new irrigation system.

Following completion of work on the Blue Monster, the Red, White and Gold layouts will be improved. Work will take place on one course per year to minimize disruption for resort guests. In April, KSL agreed to invest

\$185 million in Boca Raton (Fla.)



Particle distribution pattern for Scotts, methylene urea fertilizer/pendimethalin product.

weed control, ticles money can buy.

Season-long crabgrass control is just one consideration, and pendimethalin answers it. But pendimethalin also outperforms other preemergent herbicides on tough-to-control weeds like goosegrass and oxalis.

Now Scorts fertilizer-based pendimethalin line also features Poly-S, technology, the most efficient and cost-effective turf fertilizer ever developed. This exclusive technology offers programmed, flexible release rates and more predictable response. It's virtually dustfree. And it's available only from Scorts.

Offering a broad line of different fertilizer/pendimethalin products, your Scott Tech Rep is ready to help you select the formulation that best meets your needs.

For more information, contact your Scott Tech Rep today. Or call 1-800-543-0006.



Pendimethalin Plus Fertilizer

Resort & Country Club. The money was intended to refinance the club's debt, planned expansion and cash distribution to the hotel's partners. The deal was expected to close during summer.

"We signed a letter of intent," said Bradley Quayle, KSL's vice president of business development and corporate communications. "It's hanging on by a thread. We're looking for deals all the time."

The type of deals have to be special, however, Quayle noted.

"We're looking for irreplaceable properties—like Doral, PGA West and LaQuinta — that could never be built again," he said.

And for that, the company is willing to pay cash.

KSL Recreation Corp. was formed in 1992 to acquire and operate projects in the leisure, resort and travel fields.

"We believe that there are excellent opportunities created by the over-building or expansion of recent years which could be improved significantly by our operating and financial capabilities," said KSL President Michael Shannon.

Destination resorts needing financial and professional management and/or capital may be receptive to an all-cash transaction made possible by the resources of KSL's parent company, investment company giant KKR. KSL has targeted golf resorts as having particular growth potential.

"Since 1970, the increase in golfers has outpaced the increase in golf courses by more than four to one," Shannon said. "In particular, the 40-to-60 age group of golfers will continue to grow disproportionately with the rest of the population in the years to come."

KSL seeks 100 percent ownership. But partial ownership with appropriate controls for KSL and options to purchase controlling interests are also considered, Quayle said.

While KSL's resort division concentrates on unique properties, the company's community division operates The Fairways Group. Fairways owns and operates 16 daily-fee and private courses in five Atlantic states.

In addition to Shannon, KSL's upper management team includes Executive Vice President of Operations Larry Lichliter and Director of Finance and Acquisitions John Saer.

NGCOA show

Continued from page 43

bers to attend a show which is specifically designed to meet the needs of the owners," NGCOA Executive Director Mike Hughes said.

"By restricting the number of exhibits while offering a broad range of services and products, the show will provide the time for owners to meet with the exhibitors they need to see in a relaxed setting."

THE HOLE-IN-ONE EVENT IN ASIA

INTERNATIONAL GOLF EXHIBITION & CONFERENCE

Presented by: CONNEX · GCSAA · IMG

23 - 26 March 1995 · World Trade Centre Singapore

From Shanghai to Bombay, the golf industry in Asia has experienced unprecedented growth over the past decade. As new markets emerge and existing markets mature, opportunities for those providing golf related products and services will continue to evolve.

Now entering its fifth year, Golf Asia has distinguished itself as the region's pre-eminent golf trade show. As evidenced by the participation of 220 exhibitors in 1994, Golf Asia has proven to be an invaluable resource for those wishing to expand their business interests in golf's growth market.

By the exhibitors' own estimates, more than US\$131 million in total sales have been concluded through their participation in Golf Asia over the last four years.

Golf Asia '95 will continue to cater to two broad segments of the trade. For those exhibitors in the Industry Section, attendees will include club owners, managers and superintendents. Exhibitors in the Commercial Section interface with the region's top retailers, club professionals, distributors and membership brokers.

Golf Asia '95 will further expand what is already the region's most comprehensive educational programme.



This will include the 5th Asia Pacific Golf Conference, the foremost golf course development and management seminar and, for the third year running, the Golf Course Superintendents Association of America (GCSAA) will conduct a series of seminars offering the trade targeted information.

Mail this coupon with your business card to Connex Pte. Ltd, 7500A Beach Road, #04-302 The Plaza, Singapore 0719. Tel: (65) 296 6961 or fax us at (65) 293 5628.

 Please send me more details on Golf Asia '95 Exhibition. Please send me more details on the 5th Asia Pacific Golf Conference. Please send me more details on the GCSAA seminars. 	00
Company: Products/Services: Designation: Address:	PARTICLUSICAN, MILLING
Address:	The state of the s
resented by:	EL STOR





Don't miss the chance to book your space at the only golf show you need to attend.

SUPPLIER BUSINESS



LESTER TO HANDLE MULCH MAGIC

AMES, Iowa — Brent Lester, a graduate of Iowa State University, was promoted from his specialty sales position at Becker-Underwood to Mulch Magic PF sales manager. Lester has been employed at Becker-Underwood for two years and has worked extensively with Mulch Magic. Lester can be reached at 1-800-232-5907.

ANCHOR, ARMOR CHANGE LOCALES

Changes in scenery for two industry suppliers: Anchor Wall Systems can now be reached at 6101 Baker Road, Suite 201, Minnetonka, MN 5545-5973; phone — 1-800-473-4452, 612-933-8855; fax — 612-933-8833. Meanwhile, Armor Systems Inc. has moved to 1626 W. Airport Blvd., Sanford, FL 32773-4814; phone — 407-323-9787; fax — 407-330-0442.

STIDHAM MOVES UP AT CYANAMID

WAYNE, N.J. — Brian W. Stidham has been promoted to national sales manager for the Turf and Ornamental and Pest Control Products Group at American Cyanamid Co. Previously, Stidham directed all Midwest Sales accounts for golf course, lawn care, landscape and nursery markets. Before joining Cyanamid in 1993, Stidham was the professional products manager for Terra International, Inc.

MONTANO THE NEW VP AT WESTERN

THOUSAND PALMS, Calif. — Aaron R. Montano has been promoted to vice president of Western Golf, Inc., a manufacturer of golf course accessories, driving range equipment and miniature golf supplies. Montano has been national sales manager since 1990 and will now assume responsibility over operations, marketing and sales. Montano currently serves on the Southern California District Export Council.

HENDRICKSON BROS. TAP SHEPPARD

CORONA, Calif. — Richard Sheppard has been appointed the new marketing director for Hendrickson Bros., the micro-irrigation manufacturer.

Sheppard will coordinate representative and OEM sales, while assisting in market and product development. For more information, contact Sheppard at 909-737-6822.



737-6822. Richard Sheppard GOLF COURSE NEWS

Scotts & Pursell settle their differences

By HAL PHILLIPS

Pursell Industries of Sylacauga, Ala., and O.M. Scotts & Sons Co. of Marysville, Ohio, have reached an out-of-court settlement following a pair of lawsuits pertaining to an advertising campaign waged by Pursell in 1993.

The ads, which compared Pursell's Polyon fertilizer technology with Scotts' Poly-S technology, appeared in several trade magazines during a four-month period in 1993. Scotts brought suit in September of that year, claiming the ads were misleading. Shortly thereafter, Pursell countersued on similar grounds. Both suits were settled on Sept. 28 of

this year. The U.S. District Court for the



Southern District of Ohio dismissed them Sept. 30. As part of the settlement, Pursell and Scotts agreed not to publish — for a period of four years — any advertisements comparing any Scotts coated fertilizer, including Poly-S, with any Pursell coated fertilizer product, including Polyon, unless they have first run a series of agreed-upon tests.

"It's a joint settlement agreement," said Chris Schmenk, associate general counsel for Scotts. "I'm not at liberty to discuss any more about the settlement. We had some confidential provisions.

Continued on page 50

<image>

NEW PRODUCT OF THE MONTH

The new Ultima golf car from Yamaha is ready for shipment. In fact, the Country Club of South Carolina in Florence and Franklin (Mass.) Country Club — two of the first courses to purchase the new Ultima — give it high marks. Both clubs cited the Ultima's Sentry Body Protection System, featuring vinyl-covered side sills made of durable heavy-gauge material. The worm gear and pitman pin steering is designed to emulate power steering. For more information on the Ultima, call Yamaha at 404-254-4150. For more new product information, see page 49.

Claiming breach of HydroJect patent, Toro sues Landpride

The Minneapolis-based Toro Co. has filed a lawsuit in the Federal District Court of Minnesota against Assaria, Kan.-based Great Plains Manufacturing, Inc. for alleged patent infringement of Toro's HydroJect 3000 turf injector.

In its suit, Toro alleges that Great Plains, through its Land Pride division, has infringed four U.S. patents. Toro indicated it is seeking compensatory damages and an injunction against Great Plains.

At the Dallas GCSAA show this year, Land Pride did display a liquid injector. The company could not be reached for comment.

International PVP law takes effect in spring 1995

By MARK LESLIE

ASHINGTON, D.C. — A new Plant Variety Protection law, which had

split many in the American seed industry, was signed by President Bill Clinton on Oct. 6, and will take effect next April. The legislation will make the United States the first nation to come into compliance with the new international Union for Protection of Varieties (UPOV) treaty.

Four other countries must join the United States in order for the UPOV treaty to take effect. UPOV was first passed by 21 countries in 1978 and rewritten in 1991. "Some are very close but no one has officially signed on yet," said Leslie Cahill, American Seed Trade Association vice president of governmental affairs.

Public Law 103-349 passed the Senate May 25, passed the House with minor modifications on Aug. 12, and went back to the Senate for final approval before Clinton's signature.

UPOV's purpose is to ensure quality control; truth in advertising; and enforcement, ensuring the seed in a bag is exactly what its label states.

"Overall, this was very good for not only the seed industry but, most impor-Continued on page 52

Jacobsen names Florida distributor, realigns sales & marketing

FT. LAUDERDALE, Fla. — Kilpatrick Turf Equipment has been named the Jacobsen dealer in South Florida. Kilpatrick Turf Equipment will be responsible for Lee, Glades, Hendry, Collier, and Charlotte counties along Florida's West coast; and Indian River, Okeechobee, St. Lucie, Martin, Palm Beach, Broward, Dade and Monroe counties along the state's East coast. Kilpatrick can be reached at 1-800-432-0066.

RACINE, Wis. — Officials at Jacobsen Division of Textron Inc. have announced a realignment of the company's sales and marketing departments, now combined under the direction of **Harold Pinto**, vice president sales and marketing.

Ralph Nicotera, director of North



Harold Pinto Ralph Nicotera

American Sales, is now responsible for product sales to golf and non-golf markets through Jacobsen dealers and company-owned retail outlets.

Jacobsen has also announced personnel changes in the company's service parts and whole goods distribution areas.

Steve Nelson has been named direc-Continued on page 48 Steve Nelson





Wayne Whitehead November 1994 47

SUPPLIER BUSINESS

Ciba sponsors certification lunch, international lounge at GCSAA

SAN FRANCISCO — As a tribute to the commitment made by certified golf course superintendents, Ciba Turf & Ornamental Products has joined forces with the Golf Course Superintendents Association of America (GCSAA) to host a certification luncheon during its 66th International Golf Course Conference and Show.

Ciba has also teamed with GCSAA to offer an international lounge, where professional interpreters will assist Japaneseand Spanish-speaking attendees with registration and orientation.

GCSAA's annual conference and show is scheduled for Feb. 20-27, 1995, at the Moscone Center here.

The GCSAA and Ciba partnership will include an exclusive complimentary luncheon and program for certified golf course superintendents to be held Friday, Feb. 24, in the San Francisco Marriott. To become certified, a candidate must have five years' experience as a golf course superintendent, be employed in that capacity and meet specific education requirements of college credit or continuing education units. The candidate then must pass a rigorous six-hour examination.

GCSAA instituted the certification program in 1971 to recognize outstanding and progressive superintendents. More than 1,400 active GCSAA members currently hold "CGCS" status.

"GCSAA's continuing education and certification programs produce the best professionals this industry has to offer," said

Jacobsen hires

Continued from page 47

tor, Service Parts and Distribution, while Laura Kozenski becomes manager of distribution. Gene Majewski has been named parts planning manager and Diana Gory becomes service parts customer service supervisor. Officials at Jake have also named Wayne Whitehead as director of special accounts. Whitehead is responsible for the sale of Jacobsen products to special-account customers in the golf course industry.

...

Officials at Jacobsen have named **Neil Woodfin** as field service manager, Asia/Pacific Region. He is responsible for service and parts issues in the Asia/Pacific region including distributor service training and technical support. Woodfin will be based at the Jacobsen office in Singapore.

The company has also named Jon Clapper as manager of Plant Engineering and Maintenance here at Jacobsen's Racine location. He is also responsible for the company's environmental compliance. Bill Liles, director of turf and ornamental products for Ciba.

The luncheon is scheduled for 12:15-1 p.m., with the program following from 1-1:45 p.m. The program portion of the certification event will be open to all GCSAA members and will include a business meeting. There will be discussion of new eligibility requirements for certification and recognition of newly certified superintendents.

NACA NO LONGER; NOW IT'S ACPA

WASHINGTON, D.C. — The National Agricultural Chemicals Association (NACA) has changed its name to the American Crop Protection Association (ACPA), according to ACPA Excutive Director Jay Vroom. The ACPA's address remains: 1156 Fifteenth Street, N.W., Suite 400, Washington, D.C. 20005; 202-296-1585; Fax — 202-463-0474.

New chairman at RISE: Jan Novak

NAPLES, Fla. — Jan Novak of Monsanto/The Solaris Group has succeeded Rhone-Poulenc's Scott Johnson as chairman of the specialty chemical trade association, RISE (Responsible Industry for a Sound Environment).

Novak accepted the gavel during The RISE Annual Meeting held here in September. Bob Yarborough of Lesco, Inc. is the organization's new vice president, while Tommy Reeves of Oldham Chemical is the new treasurer.

Also announced at the Annual Meeting were additions to the RISE Governing Board: Gene Johanningsmeier of Turfgrass, Inc., Bill Liles of Ciba, and Dick Stahl of The Scotts Co. These new members replace retiring board members Duane Hagert of Wilbur-Ellis, Marvin Moore of Riverdale Chemical and Tom Perkins of American Cyanamid.

Completing the Governing Board for 1995 are Peter Machin of The Andersons (ex-officio), Ron Fister of Sandoz Agro, Dick Holzschu of DowElanco, Denny Salettel of Tyler Enterprises and Jim Widman of AgrEvo.



You just can't beat



Good news. The days of "one-sizefits-all" lightweight fair way

mowing just ended.

Now, with the new John Deere 3215 Turf System I and 3235 Turf System II Mowers, you get the ground hugging benefits of 22-inch cutting units regardless of what turf surface you work on.

The 3215 with standard cutting units is a 25.5-hp machine designed to perform well on any turf type, but especially on the more delicate cool-season grasses. Cutting



NEW PRODUCTS

FTGA introduces slow-growing FLoraTex

The Florida Turfgrass Association (FTGA) has released FLoraTex, a new grass developed through the Florida and Texas agriculture experiment stations. FLoraTex will be used as a model for FTGA's new certification program.

FLoraTex - a low-maintenance, slow-growing grass designed to require less water and fertilizer than other Bermudagrasses - was developed to help turf managers survive the new water regulations possibly coming into effect in 1995.

The new law may prohibit watering on golf courses except for tees and putting greens.

FTGA's certification program - with backing from the Department of Agriculture, The Florida Seed Foundation, Inc. and the Institute of Food and Agriculture Sciences - will regulate the production of FLoraTex, along with the growers and their fields to help banish "buyer beware" situations for consumers

For more information, contact the FTGA at 407-898-6721.

CIRCLE #301

Protect T/O in water soluble bags

W. A. Cleary Chemical has announced a first for Protect T/O, its anti-blight turf and ornamental product

Protect T/O (80% mancozeb) has received EPA approval for packaging in water soluble bags.

Protect T/O can be used for the control of a variety of turf, ornamental and greenhouse diseases such as pink snow mold in turf and Botrytis, Pythium and

Phythophthora blights. Protect T/O is available in a 24pound case containing eight three-pound foil pouches. Each three-pound pouch is filled with four- to 12-ounce water soluble bags.

For more information, contact Cleary at Southview Industrial Park, 178 Route 522, Suite A, Dayton, N.J. 98810; or call 908-329-8399; or fax 908-274-0894.

CIRCLE #302



THE SYSTEM

units are 5 inches in diameter and feature 7-bladed reels.

The 32-hp 3235 can be equipped with standard or heavy-duty ESP[™] cutting units. The ESP units are 7 inches in diameter, have 3-inch rollers, and feature 8-bladed reels.

The ESP's wider mouth.

extra weight, and highercapacity hydraulic motors allow them to work well where lightweights never have beforelong grass, wet conditions, tough warm-season grasses, and scalping for overseeding operations.

For the name of your nearest

distributor, or free literature, call 1-800-544-2122. Or write John Deere, Dept. 956, Moline, IL 61265.



Par Aide unveils **Divot** Mate

Par Aide's Divot Mates should get the golfer off the tee in the right frame of course-preserving mind - repairing divots as they start their round adventure.

Its hinged weatherproof lid, along with an optional mounting stand, keep the divot mix high and dry. Because of its generous four-gallon holding capacity, refills are infrequent.

Par-Aide signs, virtually indestructible, color-fast, fade-resistant and easy-to-install stakes, also will be featured Nov. 11-12 at Golf Course Expo. For more information, contact Par Aide at 3565 Hoffman Rd. East., St. Paul. Minn. 55110; or call 612 779-9851. CIRCLE #303

Iron supplements, for turf

Emerald Isle's SeaQuential, a chelated liquid supplement for turf, will make its debut at Golf Course Expo Nov.11-12.

SeaQuential's three forms of iron provide sequential, sustained availability. Turf is said to develop and maintain a consistent, natural and long-lasting color. SeaQuential is non-corrosive and tank-mix compatible with most commonly-sprayed turf maintenance materials.

For more information, contact Emerald Isle at 2153 Newport Road, Ann Arbor, MI 48103; or call 313-662-2727. CIRCLE #305

Self-service club cleaner

Stroke Saver, a high tech selfservice vending machine for cleaning a full set of golf clubs in a jiffy, will be on display at Golf Course Expo Nov.11-12.

This token-operated machine uses environmentally-safe ultrasonic energy to gently and precisely clean club heads. Avoided are rags, brushes and other abrasive cleaners. For more information, contact The Resource Network, Sports Marketing Group, P.O. Box 26236, Rochester, N.Y. 14626; or call 716-227-9350.

CIRCLE #306

Portable irrigation from Treegator

The Treegator portable drip irrigation system delivers 20 or 50 gallons of water to roots in exact quantity without runoff.

Constructed of green, nylonreinforced polyethylene and heavy duty nylon zippers, Treegator is said to reduce watering frequency by 50 percent. For more information, contatct

Spectrum at P.O. Box 18187, Raleigh, N.C. 27619-8187; or call toll free 1-800-800-7391. CIRCLE #304

Golf Course Marketplace

To reserve space in this section, call Mary Anderson, 813-898-7077

ADVERTISING INFO.

1994 RATES

2X 12X 6X Per col. inch: \$75.00 \$65.00 \$50.00 Add-on per 1/4": \$18.75 \$16.25 \$12.50 Logo incl. in ad: \$40.00 \$40.00 \$40.00

- · Rates are per insertion.
- Minimum 2-time insertion.
- · Prepayment is required.

Send prepayment & ad copy to: **GOLF COURSE NEWS** 227 Second Ave. N. St. Petersburg, FL 33701 (813) 898-7077 Fax (813) 825-0923

EMPLOYMENT **OPPORTUNITIES**

GOLF COURSE CONSTRUCTION

Project Managers, Shapers, Lay-out Specialists needed at once. Must be willing to travel. Fax resume and date available to: (616) 547-7009.

JOB SEEKERS

For a fresh source of green industry job openings, subscribe for 3 months (6 issues), just \$19.95. EMPLOYERS-List your job openings, quickly and inexpensively. Call for details: 1-800-428-2474; Fax: 1-800-884-5198. Farrell's JOBS IN HORTICULTURE, 154 E. Chapel Ave.; Carlisle, PA 17013-3435. MC/Visa.

PROJECT MANAGER

Southern California golf course, clubhouse and infrastructure projects. Bidding, selection and administration of prime contracts. Invoice and billing policies and procedures. Reporting, scheduling and recordkeeping. Mail or fax resume to: Golf Division Manager, 200 South Los Robles Ave. #400; Pasadena, CA 91101. Fax no: (818) 440-0060.

FOREMEN & SHAPERS WANTED

Turco Renovations, a large, established, northeast golf course construction firm, seeks working foremen & shapers with seven years minimum experience required in building golf courses. Company seeks a well organized and energetic person who is a team leader. Must travel. Fax or mail resume to: P.O. Box 627; Suffern, NY 10901. Fax no: (914) 357-8086.

ESTATE REAL

GOLF COURSES WANTED Southwest Golf is interested in purchasing or leasing golf courses.

Call Dick Campbell at (505) 898-0960

TEXAS GOLF COURSES 9 & 18 holes-Statewide. Some with extra land, development lots. Descriptive list available.

TEXAS GOLF PROPERTIES 1603 Lightsey-Austin, TX 78704 512/442-7105 Fax 512/442-1812



ARCH STYLE STEEL BUILDINGS

For Cart & Equipment storage. Factory Direct from \$186 sq. ft. Save money on buildings in stock. 20X30; 25X40; 30X50; 40X76. Easy to erect. ARCHWAY STEEL BUILDINGS: 1-800-344-2724

Scotts introduced Poly-S shortly after that.

And there was quite a bit of confusion

among superintendents about which was

which. Scotts chose a trade name that is

were the same, while we would disagree.

Poly-S is polymer-sulfur coated, while

"Scotts would have you believe they

PIPE LOCATOR

Inexpensive! Locates, traces underground drain, water pipelines of clay, PVC, ABS, steel & cement. Finds sprinklers, valves & clogs. Used by over 1,000 golf courses. Bloch & Co., Box 18058, Cleveland, OH 44118. (216) 371-0979.

BUSINESS OPPORTUNITIES

EXCEPTIONAL OPPORTUNITY!

NON-PROFIT group of eager golfers has 255-acre site with two creeks, golf course architect's plans for 18-hole course and residential development. Looking for developer or partner. Fax inquiries: (815) 248-4528.

BUSINESS SERVICES

ATTENTION: GOLF COURSE OWN-ERS, OPERATORS, DEVELOPERS AND ARCHITECTS

Now you have the best available people at affordable prices. We will supply you the people for all aspects of golf course construction, turf grow-in, on site maintenance training with certified golf course superintendents anywhere in the world. We specialize in long and short term placement with full insurance coverage worldwide. Call or fax your project needs to:

> Office: (714) 528-1185 ext. 27 or 45 Fax: (714) 524-7255 (714) 996-9387

LASER MEASURING

LASER MEASURING and SPRINKLER YARDAGE MARKERS

We do it all. Laser measure & installation (same day) of custom metal yardage markers for all types of sprinkler heads. Warranty included. Also tee to green measurements, granite fairway markers. Sprinkler yardage markers may be purchased separately. Contact Nick for samples & references. Fairway Yardage Designs, 800-36-TAGIT. (368-2448)

Classic Design Group

Continued from page 3 be outsourced to Central Florida Turf of Avon Park, while club management will be provided by Neil W. Harris of Orlando, said deBoer.

A civil engineer who's designed several executive-length courses — including the Hamptons in Auburndale - deBoer will erve as CGG's course architect. He also explained the firm has a continuing agreement with Snead to provide "signature" design consultation and endorsement.

"We're working with Pringle Development in Leesburg — right in the state's central corridor, retirement haven," said deBoer. "We're looking to take this right through to the management stages ... We started this company six months ago with two ideas in mind: Design a level of golf course suited to

GOLF COURSE ACCESSORIES

SOLID BRONZE SIGNAGE

- * Yardage Markers
- * Tee Signs
- * 100, 150, 200 * Commemoratives
- Laser Measuring* Sprinkler Tagging Yardage Books

FROM TEE TO GREEN, INC. 1-800-932-5223 Fax: 219-637-6874

SAVE 40% OR MORE!

Buy personalized flags factory direct & save 40% or more. Flagpoles, tee markers, etc. also available. Fast personalized service guaranteed. Call toll free. 1-800-476-7005



P.O. Box 78011 Greensboro, NC 27427

INSIDE INFO

Get the jump on your competition by subscribing to the Golf Course News Development Letter which tracks golf course projects under consideration across the nation. This twice-monthly newsletter is packed with news items detailing where and when projects will be undertaken, and by whom. Just \$195 for a year's subscription. For more information, contact Editor Peter Blais at 207-846-2295, ext.239

Scotts/Pursell suit Continued from page 47

"I will say, we think that both companies worked very hard and amicably to reach a settlement."

Added Pursell's Executive Vice President David Pursell, "There are some confidential provisions we can't discuss."

The legal tussle started in 1993 when Pursell published a series of comparative advertisements. One ad posed the question, "All poly-coated fertilizers are created equal, right?" Another employed apples and oranges.

The part we objected to," said Schmenk, "was a side-by-side comparison chart that used four different criteria, the figures for which they had no proof of." Pursell has a different point of view.

"We came out with our Polyon technol-

ogy in 1991," Pursell explained, "and

Pursell is just polymer-coated. "We ran the ad, which we still hold is 100 percent factual, in May 1993. We ran

awfully similar.

it in May, June, July and August to clear up the misperception that these products were the same. "The bottom line is, they forced us to

withdraw the ad, which wasn't run all this year anyway. The ad did its duty last year. They make a big deal that they forced us to withdraw the ad. So we're making a big deal about forcing Scotts to do these comparative tests... Basically, the lawyers made out pretty well."

the senior golfer; and eliminate the biggest headache for developers - namely, dealing with all the consultants and contractors. We do it all."

DeBoer said CGG is primarily interested in real estate-based golf communities. "But we have talked to some counties and municipalities about projects like these," he added.

Once the hot, new design approach, executive-length courses have proven taboo over the last 15 years. Does deBoer see a correlation between senior-length and executive-length?

'No. The primary people who will be playing these courses will not know they're playing a short course. They'll make a few more pars and spend three and a half hours instead of five.

"Once people see the challenge is there, despite the length, it will be an enormous success."

Golf Course Marketplace

To reserve space in this section, call Mary Anderson, 813-898-7077



November

6-9 — 15th Annual International Irrigation Exposition and Technical Conference in Atlanta. Contact 703-573-3551.

6-9 — Education Conference and Show of the National Institute on Park and Grounds Management in Orlando., Fla. Contact 414-733-2301.

7-9 — Georgia GCSA Annual Meeting at Kiawah Island, S.C. Contact Karen White at 706-769-4076.

8-11 - Turf & Grounds Exposition in Rochester, N.Y. Contact 800-873-TURF.

11-12 — Golf Course Expo in Orlando, Fla. Contact the Golf Course News Conference Group at 207-846-0600.

11-17 — Professional Grounds Management Society Annual Meeting in St. Louis. Contact John Gillan at 410-584-9754.

13-16 — 28th Annual Carolinas GCSA Conference and Show in Myrtle Beach, S.C. Contact 800-476-GCSA.

13-17 — Professional Lawn Care Association of America Conference in St. Louis. Contact Ann McClure at 404-977-5222.

13-17 — American Society of Agronomy Annual Meeting in Seattle. Contact David Kral at 608-273-8080.

14-17 — Green Industry Expo in St. Louis. Contact 404-973-2019.

17 — Landscape Integrated Pest Management Symposium in Toms River, N.J. Contact 908-349-1246.

17-18 - GCSAA Seminar on Golf Course Restoration, Renovation and Construction Projects in Fargo, N.D.*

17-19 — Tree Care Industry Expo '94 in Rochester, N.Y. Contact 800-733-2622.

18-20 - NGF Golf Summit '94 in Phoenix. Contact 407-744-6006.

19-22 - CMAA Club Issues Forum in Palm Desert, Calif. Contact 703-739-9500.

28-30 - North Central Turfgrass Exposition in St. Charles, Ill. Contact Jack Lagershausen at 312-616-0800.

29-Dec. 1 - New Jersey Turfgrass Association Expo in Atlantic City. Contact 908-821-7134.

29-Dec. 1 - Rocky Mountain Turf Conference and Trade Show in Denver. Contact Julia Marie at 303-688-3440.

29-Dec. 1 - NJ Turf Expo in Atlantic City,. Contact 908-821-1734.

December

5-7 — Texas Turfgrass Conference and Show in Fort Worth. Contact 806-354-8447.

6-8 — Georgia Turfgrass Association's 25th Annual Turfgrass Conference and Show in Atlanta. Contact 912-682-5189.

6-9 — Ohio Turfgrass Conference and Show in Columbus. Contact 614-261-6750.

1995

January

3-5 — Wisconsin Turfgrass & Green Industry EXPO in Madison. Contact 608-262-1490.

11-13 - North Carolina Turfgrass Conference and Show in Charlotte. Contact 910-695-1333.

17-19 — 65th Annual Michigan Turfgrass Conference in Lansing. Contact Kay Patrick at 517-321-1650.

17-19 — Cook College IPM short course at New Brunswick, N.J. Contact 908-932-9271.

* For more information contact the GC-SAA Education Office at 800-472-7878.

165

Free Samples!

Oak

168

C.C

98 Evergreen Ave.

Nutley, NJ 07110

P.O. Box 13159

Wichita, KS 67213

GOLF COURSE NEWS

PVP legislation

Continued from page 47

tantly, the plant-breeding community and agriculture in general," Cahill said. "This reaffirmed our bond with the American farmer and made certain people knew the rules of the game.

Turfgrass, clover and alfalfa are exempted from the controversial Variety Not Stated portion of the law, according to Tom Salt, plant variety protection examiner with the U.S. Department of Agriculture.

"If soybean, cotton or other products fail the grade, they can be used for other purposes, but that is not the case with turfgrass, " Salt said.

Thus, the law states a turfgrass must be sold by variety name - if it has a certificate of protection - unless someone walks away from a contract and doesn't make payment within 30 days of the contract's specified date. Seed companies have the option to buy the seed from the farmer and recondition it to bring it up to standard, or to allow the farmer to sell the seed as VNS, Salt said.

ASTA members, split over the issue of VNS, came out of their convention in June with "a strong and united front," Cahill said. "People were very pleased with the progress we were making, and felt that advancing the principles of the legislation was important - not only to our membership but the plant-breeding community in general."

The big change in UPOV for ASTA? "It was a recognition of the importance of farmers to be able to save seed for use on their own holdings, which we've always supported," said Cahill. "But to withhold sales of new protected varieties unless there is permission of the owner of that variety.'

Also, the new document advances the concept of and introduces the term "essential derivation" (ED), which is "very important to the plant-breeding community," Cahill said. ED is "that minimum distance between varieties... It all rests upon the issue of dependence of one variety on another. And that will be determined by the breeders."

The law did not specify any parameters or recipes for each crop. That will be ongoing because there is no agreement right now and it is a very new concept, Cahill said.

MOTOROL

Two-Way Radios from

GECOM

SP10

2 Mile Range **One Year**

Radius

Motorola
 Quality,
 Durability

Warranty



To reserve space in this section, call Mary Anderson, 813-898-7077



CIRCLE #150

FOR MORE DETAILS CALL 1-800-345-1960 or 305-974-1960 CIRCLE #151 Exceptional Software ... Superintendents Compliance / Management System "The Choice of Today's **Grounds Managers** From Equipment Tracking and Employee Training... To Compliance Reports and Chemical Records Free Demonstration Diskettes Call Toll Free (800) 472 8882 Environmental Compliance Systems, Incorporated 21 North Avenue Lake Forest IL 60045 CIRCLE #152 **POND & LAKE LINERS**

Flymo

Safety Cutting System

One Year Warranty

- Buy Direct from fabricator 20, 30, 40 mil PVC, Hypalon, HDPE, & VLDPE.
- Custom fabricated panels of up to 25,000 S.F. available.
- Material Only, Material & Supervision, or Complete Installation service,

1-800-524-8672

Colorado Lining Company, 1062 Singing Hills Road, Parker, CO 80134. 303-841-2022 Fax 303-841-5780

CIRCLE #153



CIRCLE #137 52 November 1994

ADVERTISERS' INDEX

RS#Advertise

Golf Course Marketplace

To reserve space in this section, call Mary Anderson, 813-898-7077



	nuveruser	se
107	The Andersons	12
139	Aquamaster	55
	Club Car 18-	
	Club Car	
	Colorado Lining Co	
	Continental Bridge	
	E-Z-GO	
	Eco Soil Systems	
	Environmental Compliance Systems	
	Environmental Protection, Inc Excel Bridge Mfg	
	Farmer's Marketing	
	Flowtronex/PSI	
	Fore Par	
	Formost Construction Co.	
	Fox Lake Construction	
144	Furness Golf Construction	51
108	Glenmac	14
-	Golf Asia '95	
-	Golf Course Expo	
	Griffin Industries/Nature Safe	
	Harrington/Harco Corporation Jacobsen	
161	Jesco Products/Pinhigh	52
	John Deere	
	John Deere Credit	
	JPF Distributors	
	Kirby Markers	
	Master of the Links	
103	Miles Inc.	4-5
13/	N.C. Chang & Assoc	53
120	Otterbine/Barebo	20
	Page Com	
137	Page Com	52
	Palmer Course Design	
	Par Aide	
	Partac	
	Pavelec Bros. Construction	
	Precision Small Engine Precision Small Engine	
	Precision Tool Prod. Co.	
	Pursell Industries	
	Quail Valley Turf Farm	
119	Ransomes, Ransomes America Corp	24
132	Ransomes, Ransomes America Corp.40	-41
	Rees Jones, Inc	
	Rhone-Poulenc	
	Sandoz	
	Sandoz	
	Sherman Utility Structures	
121	Standard Golf	30
149	Standard Golf Steadfast Bridge Co	52
116	Tee & Green Sod	20
113	Toro Comm'l. Prod. Div 16	-17
	Trims International Software	
110	Turfline, Inc.	15
102	Unit Structures United Soil Blenders	3
	Yard Edge	
147	York Bridge Concepts	51
	Torr bridge concepts minimum	
-		

Statement of 12 mo. Sept. ownership average issue A. Total # Copies 24,950 24,900 B. Paid and/or Requested Circulation 1. Sales-dealer, carrier, vender, counter 0 2. Paid or Requested Mail Subscriptions 18,305 17,482 C. Total Paid and/or Requested Circulation (sum of B1 + B2) 18,305 17,482 D. Free Distribution by Mail (samples, complimentary, other free) 5,363 6,270 E. Free Distribution Outside Mail 121 5,484 F. Total Free Distribution (sum of D+E) 6,270 G. Total Distribution (sum of C+F) 23,789 23,752 H. Copies Not Distributed 1. Office, overs, spoiled copies 1,161 1,148 2. Return From News Agents I. Total Issues (Equals A) 24,950 24,900 (sum of G+H1+H2) Percent Paid &/or Requested Circulation 77% 74%

Statement of ownership, management and circulation required by Title 39 of United States Code, Section 3685 for Golf Course News ISSN 1054-0644, published 12 times a year by United Publications, Inc., 38 Lafayette St., Yarmouth, ME 04096. Publisher: Charles E. von Brecht. Editor: Hal Phillips. Managing Editor: Mark Leslie. Mailing Address is P.O. Box 997, Yarmouth, ME 04096, and J.G. Taliaferro, Jr., P.O. Box 997, Yarmouth, ME 04096. There are no bondholders, mortgages, or other security holders.

THE PUBLIC ARENA

Superintendent and pro boost bottom line by working in concert

By LYNN TILTON

CASA GRANDE, Ariz. -While the challenge for Northern and Eastern courses is staying open for play the maximum number of days, the powers-thatbe at Francisco Grande Resort & Golf Club here will tell you that competition is the main challenge.

"There are 108 golf courses in the Phoenix metro area, which begins less than 50 miles north,' pro Kent Chase explained.

Still, this course — Arizona's

longest — books 40,000 rounds a year. Chase is quick to credit head superintendent Juan Rascon and his crew. "Golfers can play a round in about four hours," Chase said. "A round in the Phoenix metro area can take as long as six and a half hours."

The key to their success is keeping it green and providing for transition. And the real secret is cooperative vigilance.

"Each Friday, Kent and I tour the grounds together," Rascon explained.

With All The Abuse Your Turf Takes, Who Needs Root Pruning?

look, and the two jointly work out strategy to prevent and cure condition problems.

"We have about 140 acres to mow," said Rascon, adding that greens are kept at 11/64 of an inch, with fairways and tees at 5/8

With daily temperature variations of 35 degrees, the work is to keep it green. Bermudagrass fairways dominate in the summer, and are overseeded to ryegrass for the winter. Greens

Condition of play gets a strong and tees are bentgrass. Fairways are overseeded the first week in October, then stressed the first two weeks in April to promote a natural return to Bermuda.

"We use three wells, each 750 feet deep," Rascon said. "In July and August, our heaviest watering months, we'll pump 88 acre feet per month. Winter months take just 15 to 20 acre feet per month."

With temperatures soaring into the low 120s, shade can make a 15-degree difference in summer play - and this attracts Phoenix golfers to this course where 70 percent of annual play comes from walk-ons.

"We have many trees," Rascon said. "We don't water them any differently than we do our grass, and they seem to do well.'

They do so well that Bill Buffman, golf writer for The Arizona Republic, commented: "This course looks mature. It has a lot of nice trees. I like the way they handle transitions."

Grass is fed twice a year at the recommended rates. Trees get no extra fertilizer. "We do give new trees extra water until they're well established," Rascon added.

Dry spots can prove another challenge. Rascon and crew use a roller hose to handle those. "A little extra shot of water monthly usually takes care of those dry spots," he said.

Daily watering averages 15 minutes, half just after sundown and another seven and a half minutes before sunrise. This minimized runoff and evaporation maximizes uptake and ensures the root zone is kept at optimum moisture levels, he said. Rascon and Chase both note that heavy play in Phoenix also helps.

"Some times up there are booked a year in advance," Chase reported. "We try to make sure that our times are open until the week before." Availability helps encourage Phoenix golfers, many of them retired, to travel the extra hour to play Francisco Grande.

Another challenge to ensure return play is keeping the grounds crew out of the way.

"In the summer we start at 5:30," Rascon explained, "and the course opens at 6:30. Winter, we start work when the course opens at 7 a.m. We train everybody to work fast, to stay ahead of the golfers.'

That works well except for shotgun starts in tournaments, and tournament play gets a major emphasis at this course. On those days the crew, and the watering system, must start two to three hours earlier to ensure tournament success.

Another touch the superintendent and pro perform jointly is golf. Chase explained, "This helps Juan, and any of his crew who want to play, to see the course the way golfers see it."

In the quarter-century it's been pen, the course — designed by Ralph Plummer - has developed a large following. With summer play at \$15 to \$20 and winter play at \$50 to \$55, golfing at Francisco Grande is not only a quality experience, but it's affordable.

As with any other enterprise, quality and price are two grand keys to success, no matter how many competitors try to woo the customer.



CHIPCO® RONSTAR® G works without pruning turf roots. That means healthier roots and stronger, more durable turf. Best of all, just one preemergence application provides season-long control of 25 tough broadleaf and grassy P RHÔNE-POULENC

You know the story. The guys who swing an iron

the way a lumberjack wields an ax are the same guys

who yell the loudest when weeds give them a bad

lie. So, with all the abuse your turf takes, the last

thing you need is root-pruning from your herbicide.

That's why you need CHIPCO® RONSTAR® brand G

herbicide. University root pull studies show that

weeds-including goosegrass, crabgrass and Poa Annua. You'll also appreciate the fact that CHIPCO® RONSTAR® G is labeled for use on a wide variety of ornamentals, and is now available in a new lowdust formulation that makes application even more convenient. CHIPCO® RONSTAR® brand G herbicide. It can't improve the quality of play on Ronstar G your course, just the quality of weed control. New Low-Dust Formulation

Brand Herbicide

GOLF COURSE NEWS

BEAUTIFUL SOLUTION NUMBER 6.

AQUA MASTER AQUA MASTER AQUA MASTER AQUA MASTER

BEAUTY BENEATH THE SURFACE



Aqua Master is the industry's only

AQUA MASTER

manufacturer of ULLISTED aerating fountain pump systems. Take a closer look at



120 Volt

Lighting

• Patented, High-Efficiency Stainless

Steel Propeller Diffuser System

3 Year Motor Warranty (1 HP & up)

• Industry's First and Only

Motor Available

• No Seal or Internal Maintenance for 3 Years Guaranteed

Underwater

AQUA MASTER AQUA MASTER

AQUA MASTER AQUA MASTER

AQUA MASTER

AQUA MASTER

AQUA MASTER

AQUA MASTER

AQUA MASTER

AQUA MASTER

AQUA MASTER

AQUA MASTER

AQUA MASTER

MASTER AQUA MASTER

our beautiful solution to your water quality problems.

Interchangeable

Nozzles

Crown & Geyser - 2 HP

QUA MASTER

AQUA MASTER

AQUA MASTER

AQUA MASTER AQUA MASTER

AQUA MASTER

AQUA MASTER

AQUA MASTER AQUA MASTER AQUA MASTER AQUA MASTER

ASTER

AQUA MASTER AQUA M

Plume - 5 HP

STED

Standard High Volume Flow (HVF) - 1 HP

• ½ to 10 HP Stainless Steel Housing with the Most Energy Efficient Underwater

Cable Disconnect



Superior Aquatic Management Systems

16024 CTH X, Kiel, WI 53042 PH. 414 693-3121 FAX 414 693-3245

AQUA MASTER WILL BE FEATURED AT HORIZON GOLF BOOTH #416 AT THE GOLF COURSE EXPO IN ORLANDO

AQUA MASTER AQUA MASTER



The Medalist is the finest vehicle to ever set wheel on a golf course. In every way imaginable, it reflects E-Z-GO's continual, unyielding commitment to the game. In fact, we turned our manufacturing facility into a completely new, state-of-the-art operation. Just to produce a car this advanced.

Every detail, every feature on the Medalist is designed to give golfers the smoothest, most comfortable ride available. These same advancements make the Medalist the most durable, longest-lasting golf car you can buy. Which also means the most profitable fleet for your course. Call 1-800-241-5855 to take a closer look at the Medalist. You'll see where the game of golf is headed.



@1994 E-Z-GO Textron Location Courtesy of Arrowhead Golf Club, Denver, Colorado. A National Golf Property Operated by American Golf Corporation.