THE NEWSPAPER FOR THE GOLF COURSE INDUSTRY

Winter Kill

Mid-Atlantic superintendents are reporting huge turf loss following the toughest winter in 16 years 17

GCSAA Today

The superintendents association has joined RISE (page

Action in Asia-Pacific

Golf Asia '94 is history. Architects are busy (page 42) but questions about the show's future remain59



TPC SUPERINTENDENT OF THE YEAR

Gary Myers (right), seen here with Tournament Players Club Director of Maintenance Cal Roth, has been named the top superintendent in the TPC system. See page 20.

COURSE MAINTENANCE

Off the Record: Disease diagnosis in a bottle 17	
The look of single-striping with a triplex? Yep25	
Turf program makes grade at Fla. high school26	

COURSE DEVELOPMENT

Europeans create pro-active Ecology Unit37
Is there anything Steve Newgent can't do?38
Faldo appears eager to play the design game43

COURSE MANAGEMENT

Carolinas Golf Group: In focus, in the Southeast	52
Matrix, Golf Business Advisors join forces	53
GolfCorp eyes acquisitions, adds staff	56

SUPPLIER BUSINESS

ISK Biotech unifies global operations	59
Club Car reports first-quarter earnings	
Whatle now in th	

VOLUME B, NUMBER 5 VOLUME W Survey: Supers applying fewer, safer pesticides

By HAL PHILLIPS

More than 60 percent of golf course superintendents surveyed by the Gallup Organization indicated they have altered their maintenance practices compared to three years ago, citing pressure from government regulation, economic factors and environmental concerns.

The 1994 Sandoz National Environmental Poll, conducted by Gallup, contacted a random sample of 2,050 professionals who apply pest control products: farmers, roadside vegetation managers, lawn care workers, pest control operators, mosquito district managers and small animal veterinarians. This year's biennial survey included, for the first time, golf course superintendents.

Question: Do people in your industry Continued on page 61

Sandoz National Environmental Poll 1994

ago, are you making fewer applications of pest control products?

Do people in your industr use safer pest control products when available

Pesticide fate model may be inaccurate

SPECIAL REPORT: **POND & LAKE** MANAGEMENT,

see page 33

By DR. MIKE KENNA

GRIFFIN, Ga. - Researchers here at the Georgia Agriculture Experiment Station have suggested that one of the mathematical models used by environmental regulators and scientists to predict the fate of pesticides will need a major overhaul before it accurately represents what happens on golf course turf.

"Results indicate that the GLEAMS model, with the defined parameters of our study, overestimated the actual values received from lysimeters for the potential of 2,4-D to move through putting green root zones," reported Dr. Al Smith, University of Georgia.

The GLEAMS (Groundwater Loading Effects of Agriculture Management Systems) mathematical model is commonly used to help identify chemical and soil properties, as well as plant and meteorological factors influencing the transport

Continued on page 28

Bringing new meaning to 'earth moving'

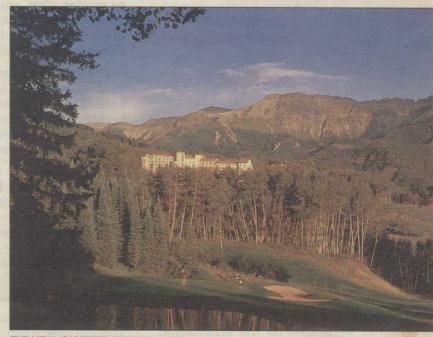
By HAL PHILLIPS

GLENDALE, Calif. -While some golfers claim their home course plays differently each time out, Shoal Canyon Golf Course almost certainly will.

Currently under construction, Shoal Canyon an American Golf Corp. project designed by Williams, Gill & Associates isn't your typical 18-hole, short course built on a mountain-top landfill. Portions of the 60-acre site are sinking at rates of up to six feet per year.

The recent Los Angeles earthquake dropped one green down a full foot overnight, according to Dale Siemens, president of Fresnobased Daylen Inc., which is

Continued on page 40



THE NEW, CAREFREE ATTITUDE AT TELLURIDE

Th newly formed management firm, Carefree Resorts, is upgrading its three facilities: The Peaks at Telluride (above), Carmel Valley Ranch and The Boulders. Carefree executives indicate they are actively seeking new additions in Mexico, Hawaii and the Caribbean. For story, see page 54.

Pooling results in huge workers' comp savings

Some Ohio course operators are enjoying an 83-percent reduction in their workers compensation insurance costs because of legislation passed in the Ohio general assembly and the efforts of the state's golf course owners association.

Bills authorizing the pooling of similar businesses for insurance purposes have according to Charles Freutel, national sales manager with the Frank Gates Service Co., a research and benefits consulting firm. This grouping allows members to obtain lower workers' compensation rates than they could individually.

Golf course owners associations in Ohio and South Carolina have taken advan-

been authorized in 40 states, tage of the legislation to offer a reduced-rate program for their members, Freutel said. The Pennsylvania state association is considering such a program, he added.

"There may be others out there as well that I'm just not familiar with," said Freutel, whose company reviews applicants for the Ohio Golf Course Owners

Continued on page 56

Graham/Panks jazz up Scottsdale

RIO VERDE, Ariz. — Touring pro David Graham and design partner Gary Panks have opened Tonto Verde Golf Club here.

The softly contoured 6,737-yard par-72 course is the centerpiece of the 600-acre Tonto Verde subdivision, being developed by Rio Verde Development, Inc. Views of the Mazatal, Superstition, and McDowell mountain ranges surround the course, providing the players with spectacular panoramas unique to the area.

They have also broken ground of the Talon Course at the Grayhawk Golf Club, in north Scottsdale.

Grayhawk developers Gregg Tryhus and Del Cochran are in the initial stages

of construction of the 7,000-yard, par-72 layout

"Scottsdale is fortunate to have several of this country's finest courses, and we have set our sights high. From the day it opens, we intend to have our first course considered as one of the best in the state," said Cochran.

Construction plans call for grassing the 176-acre layout to begin by early summer, with the course opening scheduled by year's end.

The fairways and tees are to be planted with Tifway 419, and the grassy hollows and collars around bunkers will be Tifgreen 328. The greens will have Penncross bentgrass, with a three-foot ryegrass border.



The par-4, 350-yard 5th hole at Graham/Panks' Tonto Verde Golf Club.

'That sinking feeling' is more than an expression at Shoal Canyon

Continued from page 1

building the course.

"It's a unique project, that's for sure," said Siemens. "The site itself is sinking as we speak. Most of the greens are being built without any features because you're going to get features over time, whether you want them or not.

"There's no way to predict it. Some areas are sinking faster than others."

Ground was broken last November, with seeding scheduled for July. Twelve holes

are being built on a former landfill that has been capped. The remaining six holes are perched atop a granite knoll, providing commanding views of the Los Angeles basin and even the Channel Islands on those rare, clear days.

The city of Glendale pursued a golf course development deal because the land has no other practical use, explained American Golf's Director of Construction Tom Devlin.

"We're developing the course in partnership with the city," said Devlin. "It's

a long-term lease: They provide land, we provide construction and management. We'll pay rent depending on the revenues.

"It's a wonderful site. On a clear day, there's nothing like it in L.A."

"There will be some unique problems and noticeable changes in topography. It will be a continuing maintenance problem for AGC," said Siemens.

However, if any management company is prepared to deal with a landfill course, it's American Golf.

"We probably operate more golf courses on landfills — eight — than any other management company," said Devlin. "We have a lot of experience with settlement and unique maintenance requirements.

"To say it's sinking six feet each year simply isn't accurate. That's just hearsay. It may have sunk six feet in one place while another doesn't move at all. We've also had a lot of rain, which makes the landfill settle even more."

According to Devlin, landfill courses require some special design and maintenance measures.

Irrigation, for example, cannot be overdone because water "unsettles" the underground trash. Siemens noted that landfill courses must be "meticulously drained" to avoid excess water leaching through the cap to the landfill.

Irrigation lines break more often, so facilities should employ an in-house technician to act quickly, Devlin said. Further, polyethylene pipes should be used for main irrigation lines in order to withstand the bending and stretching.

Concrete cart paths are a no-no, due to the shifting topography. And whenever possible, drainage should be handled on the surface, via swales and barancas, as opposed to underground piping.

Does the sinking and settling ever stop? "I'm not an expert on landfills," said Devlin, "but I've built enough to say it never really stops. There is a curve that shows settlement abates over time. But frankly, with Shoal Canyon, I don't know where we are on that curve."

Choices, choices.

To VFD or not to VFD

(or constant speed, centrifugal or vertical turbine, or simply upgrade the pump station you have)?

There isn't a single pump station solution. Depending on your choice, you can save time, money, energy and even your reputation. To help, SyncroFlo has written PUMP STATION SELECTION REPORT, a practical guide that reviews pumping system basics. It also has a check list of issues to address before deciding.

We don't just make pump stations, we provide irrigation solutions.

The SyncroFlo line of EAGLE® pump stations is among the most extensive in the world. You'll find our stations have more STANDARD features than other manufacturers offer as options. All are backed by the best guarantees and support in the industry, not the least of which are total system,

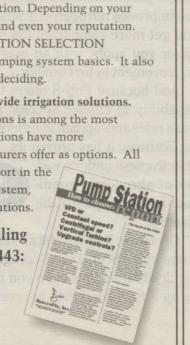
third party performance and safety certifications.

Yours for calling

Yours for calling 1-800-886-4443:

SyncroFlo, Inc.

6700 Best Friend Road • Norcross, GA 30071 (404) 447-4443 • FAX (404) 447-0230



Two family facilities planned for Dallas

DALLAS — Emerald Family Entertainment, Inc. will develop, construct and operate two new facilities in the Dallas area this year.

Galleria Golf Center will be a 52station, lighted driving range in north Dallas' Galleria shopping/ commercial district. Tour Play Golf Center, located in the suburb of Mesquite, will be a 48-station, lighted driving range, and upscale nine-hole par-3 course.

Morrishes hang out design shingle together

FLOWER MOUND, Texas — Jay Morrish & Associates, Ltd. has opened offices in this Dallas suburb. Jay Morrish is president and son Carter is vice president of the course design firm.

"This central location offers us the opportunity to work on a variety of projects covering a large geographic area. I love the Dallas area and wish we had moved here 10 years ago," said Jay Morrish.

Carter is also designing golf courses with Roy Bechtol of Austin and PGA touring pro Howard Twitty.

Graves-designed muni growing in

McCALL, Idaho — Substantial construction was completed in 1993 on a nine-hole addition to the 18-hole McCall Municipal Golf

The par-35 layout was designed by Robert Muir Graves of Walnut Creek, Calif.

The addition, developed by O'Neill Enterprises, is to be given to the city, along with 100 acres of land. Developer Peter O'Neill also will provide a mile-long section through Spring Mountain Ranch for construction of an eastern bypass road for the city of McCall.

Golf course developments and other improvements will be financed by a city local improvement district bond issue, amortized by the sale of home sites at Spring Mountain.

Neal Meagher, Graves design associate, said, "In order to match the new nine to the existing 18, we've used sand bunkers sparingly, which leaves alternative open routes into the greens."