## EDITOR Kenneth D. Williams, QGCS 650-323-0937

OFFICE

Barbara Mikel - Executive Secretary 550 Main St., Suite G P.O. Box 3360 Diamond Springs, CA 95619 Phone: (530) 626-0931

> MEDIA DIRECTOR ROBERT COSTA, CGCS Laguna Seca Golf Course

Fax: (530) 626-5132

PRESIDENT
GARY K. CARLS, CGCS
City of Sunnyvale Golf Courses

VICE-PRESIDENT ROBERT COSTA, CGCS Laguna Seca Golf Course

SECRETARY/TREASURER
Jeffrey Shafer
The Course at Wente Vineyards

PAST PRESIDENT
DAVID R. DAVIES, CGCS
Palo Alto Muni Golf Course

**DIRECTORS**ROBERT A. LAPIC
Orinda Country Club

ROGER ROBARGE California Golf Club

GARY SKOLNIK
Fountaingrove Resort & CC

AFFILIATE ADVISORS STEVE FRANZEN J. R. Simplot/Best

REX GENTRY
H. V. Carter Company, Inc.

#### **PUBLISHER**

Jo Harlow - Key Publications Phone: (925) 827-9676 Fax: (925) 674-1688 email - keypub@ncal.verio.com

THRU THE GREEN

Published monthly by the Golf Course Superintendent's Association of Northern California

## THRU THE GREEN

#### From The President

By: Gary Carls, CGCS

n July 18<sup>th</sup> Oakmont C.C. in Santa Rosa and Mike Clark CGCS will be hosting our third educational event of the season. It promises to be high quality education at a bargain price. It's that chance to bring along your assistant and learn more about our old friend, <u>Poa annua</u>. Special thanks in advance to Mike and the staff at Oakmont C.C. for giving us a truly fantastic deal that helps encourage strong meeting attendance. I hope everyone can make it.

One of the great pleasures I have had, as a member of the GCSANC Board of Directors, has been the opportunity to work with Cliff and Myrtle Wagoner. They are truly the example of going above and beyond the call of duty. Besides the years of service at the local, state and national level, they continue to contribute to the great history of our chapter. At our last board meeting they returned with the revised edition of our 65th Anniversary Scrapbook. We have donated a copy of this great history to the GCSAA for their Historical Collection. The board also authorized the printing of an additional copy that we will be bringing to our monthly meetings. I urge all of you to take some time and look back at the history of the GCSANC. See some of the names and faces that are our heritage as a chapter. Join me in thanking Cliff and Myrtle for saving this great piece of our history for future generations.

As PDI continues to round in to a final format, we are hoping to plan a meeting to further update our members as to the Initiative's final form. This will most likely be a topic of discussion after the delegate's meeting in September. Bob Costa, CGCS will be our chapter delegate this year and will attend the meeting in Kansas in September. He will also be casting our votes in Dallas. You may contact Bob or any other board member if you have concerns about PDI that you would like to express. As we have done in the past, we will give our members the opportunity to tell us how they would like to vote. Also discussed at this month's board meeting was a proposed insert in the newsletter to let members express their opinions on this topic. There will be more information on it coming in the near future.

Congratulations go out to Eric Greytok and the entire staff at the Pebble Beach Company. They once again allowed a



#### **President Gary Carls, CGCS**

Northern California course shine in the national spotlight. Conditions were superb and despite the fickle weather, everything came off very well. I can hardly wait until Tiger Woods gets a little more experience under his belt!

Finally, if you or your facility is interested in hosting a monthly meeting next year, please let Jeff Shafer or Gary Skolnik know. We are starting to formulate a schedule and already have some pretty good locations for next season. To those of you who have hosted events in the past, THANK YOU. Hosting one of our monthly meetings is another way for a member to be involved. Because of the large number of courses in our region, if those who can help out step forward, we are in a situation where we do not need to return to a facility for several years. Talk to those who have hosted meetings in the past and find out what hosting a monthly meeting did for them. If you can't host a meeting, there are other ways to help your association. By giving a little of your time, you may help ease the time crunch experienced by others.

Be sure to mark August 21st on your calendar for the annual Scholarship/ Research Tournament at Orinda C.C. This will be another opportunity to visit and network with your vendors as we continue the Superintendent/Affiliate format started last year. Get your partners lined up early and look for a great day with lots of great prizes.

Until next month, Gary.

#### Naumann's NorCal News

Mark Francetic has left Deep Cliff Golf Course in Cupertino and is now the superintendent at Shoreline Golf Links in Mountain View. Shoreline is owned and operated by the City of Mountain View and Deep Cliff is operated by CourseCo.....Frank Zamazal is the new superintendent at Spyglass Hill Golf Course in Pebble Beach. Prior to accepting this position he was the first superintendent at Eagleridge Golf Course in Gilroy. Replacing Frank is Patrick O'Fee. Patrick had been the assistant at Eagleridge before his promotion. Eagleridge is operated by Crown Golf....Ross Miller has left PinHigh Golf Center and is now in golf course construction on the east coast. Chris Bailey has left Fremont Golf Course and is now the superintendent at Big Foot Golf Course near Eureka.....Ken Rasmussen is the new superintendent at Valley Gardens Golf Course in Scotts Valley....Zane Bentley is the new superintendent for the Hayward Area Recreation District (HARD). They have two golf courses in Hayward; Skywest and Mission Hills of Hayward and he will be overseeing both of them. Zane was the superintendent of a course in Pensacola, Florida before coming west.....

#### **Replace Your Divots**

Reprinted from GolfWeek

You can literally eat off the fairways at Muirfield Village Golf Club in Dublin, Ohio and never get sand in your food. That's because Memorial Tournament host Jack Nicklaus believes players should get relief from sandy divots, because technically they are ground under repair.

In 1994, golf course superintendent Mike McBride designed an apparatus that would cut strips of sod from the Murfield Village nursery. Every day at the end of play, a crew fills in divot holes with fresh grass. The PGA Tour agronomy field staff does not allow this technique to be used during The Memorial tournament because it feels the practice leaves small seams. So McBride's staff picks up fresh divots off the driving range tee and uses those to fill in the damage to the fairways.

GCSANC Meeting Program July 18, 2000 Oakmont C.C., Santa Rosa

Program Outline — GCSAA .35 PDU's

"Maintaining Cool Season Putting Green Turf During the Summer Season"

7:00 a.m. – 8:00 a.m. Meeting Registration

8:00 a.m. - 9:00 a.m. Dr. Robert Green, U.C. Riverside – Management of Annual

Bluegrass Putting Greens in California.

9:00 a.m. – 10:00 a.m. Mr. Pat Gross – USGA – Methods of Dealing With Heat

Stress on Cool Season Putting Green Turf.

10:00 a.m. – 10:30 a.m. Mr. Mike McCullough – NCGA – Problems and Solutions

Used to Combat Turf Loss on Putting Greens in the NCGA

Area.

10:30 a.m. – 11:30 a.m. Putting it all together. Panel Discussion by all speakers and

question and answer period.

11:30 a.m. BBQ Lunch

12:30 p.m. Golf off 1st and 10th tees

#### **Future Board Meetings**

July 10th @ Fountaingrove Resort 12:00 pm.

August 15th @ Oakhurst CC 11:00 a.m.

August 26th - State board meeting in Reno

#### Media Scorecard - June

- √ Golf at Orinda Bob Lapic, Bob Costa, Eric Gilmore
- √ Golf Column CC Times Bob Lapic/US Open Staff
- √ Golf Today Question of the Month
- √ Press Release US Open Staff
- √ Press Release Gary Carls Environmental Certification
- √ Supt/Pro Invitations extended to four golf writers
- √ Superintendent News Press release Palo Alto Juniors
- √ Monterey Herald Feature Article "Their Grass Is Greener"
- √ Monterey Herald Feature Article "Staying Alive"
- √ Golf Column S.F. Examiner "Greens Crew Hits Rough Times"

#### **Golf Course Is Fined for Discharges**

By SEEMA MEHTA, L.A. Times Staff Writer

Pelican Hill Golf Course in Newport Beach was fined \$148,000 Friday for illegally discharging recycled water into the ocean off Crystal Cove, state water officials said.

"Environmentally, it probably didn't have that much effect, but it's very serious due to the magnitude of the discharges, the fact they weren't reported and they were repeated," said Kurt Berchtold, assistant executive officer of the Santa Ana Regional Water Quality Control Board.

Prompted by a letter from Orange County CoastKeeper, investigators learned that course operator Western Golf Properties had eight unauthorized discharges of nearly 16 million gallons of recycled water between August 1999 and January. Similar discharges occurred in 1996.

Irrigation water overflowed from two ponds into the ocean off Crystal Cove State Park, which is designated an "area of special biological significance" and protected under the 1997 California Ocean Plan.

"Certainly, we'd like to put it behind us, and we regret that it happened," said Joe Black, president of Western Golf Properties, based in Scottsdale, Arizona. "By the same token, that's a lot of money." Black said he is not sure whether his company will appeal the fine. He said safety measures have been added since the latest incident: New valves and an alarm system have been installed, the lake level has been lowered and policies outlining proper response have been implemented.

CoastKeeper, an environmental group based in Newport Beach, filed a notice in January of intent to sue the course operator, as well as the Irvine Co., the course's owner, and the Irvine Ranch Water District, the provider of recycled water that is used to irrigate the course under the federal Clean Water Act.

Berchtold said no fines were levied against the developer or the water district because investigators believe it was the operator who was negligent.

Garry Brown of CoastKeeper said the group has not sued and is in talks with Irvine Co. officials.

As for the fine, he said: "Well, it's about time. As far as the money, it's almost a moot point. It doesn't bring back the damage it caused. . . . [But] there's been an acknowledgment."

Copyright 2000 Los Angeles Times

## Dursban Remains Labeled For Golf Course Applications

Dow AgroSciences LLC announced an agreement with the US EPA that will allow the continued use of Dursban insecticide (chlorpyrifos) on golf courses. Chlorpyrifos products were among the first scrutinized under new standards resulting from the passage of the Food Quality Protection Act of 1996 (FQPA).

"We're pleased that golf course superintendents will continue to realize the benefits of this product," said Bruce Miehle, general manager for Turf and Ornamental Products at Dow. "Dursban products have been on the market for more than 30 years. More than 3,600 studies and reports have been conducted examining critical aspects of chlorpyrifos products as they relate to health and safety. No other insect control product has been more researched more thoroughly."

The agreement that Dow announced includes a voluntary cancellation of most inand-around the home uses of chlorpyrifos in the U.S., including use of the product as a full-barrier termiticide treatment in existing residential structures.

## Free Compost-Quality Publication Available

Not quite sure how to evaluate the quality of compost? Check out the California Integrated Waste Management Board's new publication "Compost: Matching Performance needs with Product Characteristics." This document helps you to evaluate compost based on your specific needs and guides you in the types of questions you should ask compost producers. The publication is available free of charge. Contact Bertie Mora at (916) 255-2708 or send your request via email to <a href="mailto:bmora@ciwmb.ca.gov">bmora@ciwmb.ca.gov</a>. You may also locate suppliers of compost on the Organics Outlook web site at <a href="https://www.ciwmb.ca.gov/organics/farming.">www.ciwmb.ca.gov/organics/farming.</a>

#### Permacorp (Cont'd)

and narrow trench; no need for geotextile fabrics; separate intake and discharge system; it is the only drainage product designed to be maintained by clean out and flushing; its six foot lengths are easily transported; and is easily connected to standard drainage pipe and fittings.

Currently Perma Panel™ is available in the Western United States with distribution throughout the country scheduled for 2001 and is sold through leading irrigation and green industry distributors.

For more information visit the web site at: <a href="www.permacorp.com">www.permacorp.com</a> or contact Jim Sabraw, Director of Marketing & Sales at 888/844-0296 or <a href="mailto:sabraw@permacorp.com">sabraw@permacorp.com</a>.

#### **Quick Quotes**

"Democracy means government by discussion but it is only effective if you can stop people talking."

- Clement Attlee -

"The Future is something which everyone reaches at the rate of sixty minutes an hour, whatever he does, whoever he is."

- C. S. Lewis -

It's Time to Take a Closer Look at Hunter Golf

## Introducing Vista - With the Power of Real-World Visual Control

Reality-Based Software with Animated Graphics

Hunter Golf introduces Vista, the most advanced and powerful irrigation control system available today. Vista utilizes the precision of your irrigation consultant's AutoCAD™ design to create realistic 3D graphics that allow you to "drive" every fairway on your course, fine-tuning the system from a realworld golf cart perspective. Advanced yet easy to use, Vista features truly automated programming, real-time dynamic flow balancing and a familiar internet-style interface. See your local distributor and take a closer look at the full range of innovative products from Hunter Golf. 1940 Diamond Street, San Marcos, California, USA 92069 Tel: 760-744-5240 • Fax: 760-744-7461 • www.huntergolf.com



## An Innovative Product Line for Efficient Irrigation Management

Hunter Industries is the established leader in water-efficient irrigation systems. Founded by industry pioneer Edwin J. Hunter, who held more than 120 patents in the field, Hunter has been associated with golf course irrigation since the 1960s. Today Hunter Golf features a complete line of products to help superintendents reach their goals of maintaining a beautiful, playable course throughout the season while also controlling water, labor and energy costs.

#### **Hunter Golf** Rotors

Hunter Golf features a complete line of gear-driven rotors for tees, greens and fairways. They are available as Check-o-Matic, Electric or Hydraulic Valve-in-Head and Block, and offer precise distribution of water and convenient through-the-top adjustments and servicing. All models offer full circle or 40° to 360° adjustable arcs.

**G60 Series** Low pressure sprinkler; low precipitation rates

• 51' to 67' radius

G70 Series Mid-range rotor

• 53' to 76' radius

**G90 Series** Widest coverage

• 69' to 97' radius

#### **Hunter Golf Valves**

ICV Glass-filled nylon construction

• Pressure rated to 200 PSI

HBV Solid brass with built-in flow control

• Pressure rated to 200 PSI

#### Vista Central Control System with 3D Graphics

Reality-based animated software program permits a superintendent to view the entire course on his computer monitor from a "golf cart perspective." Vista's flow management capability incorporates the characteristics of your system and re-balances irrigation flow daily.

- Optimizes pump efficiency and minimizes watering window automatically
- Monitors and senses problems in the field
- Reacts in real-time, making programming and flow balancing adjustments daily

#### Genesis Central Control

A powerful, yet easy to use Windows<sup>™</sup> based system, Genesis features full programming and communications with radio or hardwire field controllers, data retrieval units and weather stations from a single location. Fully expandable.

Reliable Gear-Driven Rotors Central/Satellite Control Systems Vista Reality-Based Software Viking Decoders Data Retrieval Devices and More



- Genesis Central Control can handle a 9-hole golf course, a 36-hole resort complex and more
- True two-way command communications
- · Manages up to 999 field controllers

#### Genesis/Vista Field Controllers

Fully-featured controllers operate as stand-alones or part of a complex network. Modular design allows quick and easy field upgrades to 60 stations and to a central-ready hardwire or radio-equipped controller.

- Most advanced range of features
- · Stainless steel or plastic enclosures
- · Pedestal or new wall mount

#### Genesis Viking Two-Wire Decoders

A cost-effective solution for many courses, this single two-wire cable system installs over an entire course and connects decoders with both *select* and *power* valves and/or electric valve-in-head sprinklers.

- Each controller handles up to 103 stations
- Hardwire or radio communications

#### Genesis Data Retrieval

Connect the "real world" to your control system with up to six sensors, including flow, wind speed and direction, rain and contact closures. Offers multiple controller capabilities and input for system status, custom reports and more.

 Monitor data live or store in nonvolatile memory

Authorized Hunter Distributor

#### More Than 80 Locations To Serve You



San Jose, 1735 Rogers Ave. Tel: 408-436-8848

San Leandro, 2452 Polvorosa Ave. Tel: 510-357-9530

# All Grown

Featuring: Bentgrass, 100% Rye, Rye Blue, Blue, Fine Fescue, Tifway II (overseeded or non).

Wade Alexander 209/993-3330 Greg Dunn 209/993-3329



Life is Short. Sod It!

OFFICIAL SOD OF THE SAN FRANCISCO 49 ERS

The Milliken Chemical Turf Products Umbrella Invisorate

Milliken Chemical M-402 Division of Milliken & Co. P. O. Box 1927 Spartanburg, SC 29304 Phone: 1-800-845-8502 www.millikenturf.com















## Thru The Green

#### **Supporter Listing**

#### **Spot Water Management**

— Specializing in central irrigation systems — central programming & training, hydraulics, GPS mapping & irrigation as-builts, field trouble-shooting, sprinkler nozzle performance, and weather stations service.

www.spotwater.com

408-288-8153

aslack@spotwater.com

#### Bay Irrigation & Turf Supply Inc.

Providing one stop shopping for sprinklers, valves, pipe, fittings, sod, seed, stakes, drainage and lighting. Our 25th year of service to Northern California.

Jeffrey Jones, VP/Sales

800-622-TURF (8873)

#### Russell D. Mitchell & Assoc., Inc.

Providing quality irrigation design and consultation services including bid document development, hydraulic analysis, and field staking.

510-939-3985

Fax 925-932-5671

#### **Bryant Taylor Gordon Golf**

Golf Course Irrigation Design and Consulting New Construction and System Renovations. Over 30 years in golf course industry.

Bob Bryant

949-724-8998

Dave Taylor

#### DELTA BLUEGRASS COMPANY



### Quality Golf Course Sod Blends & Services

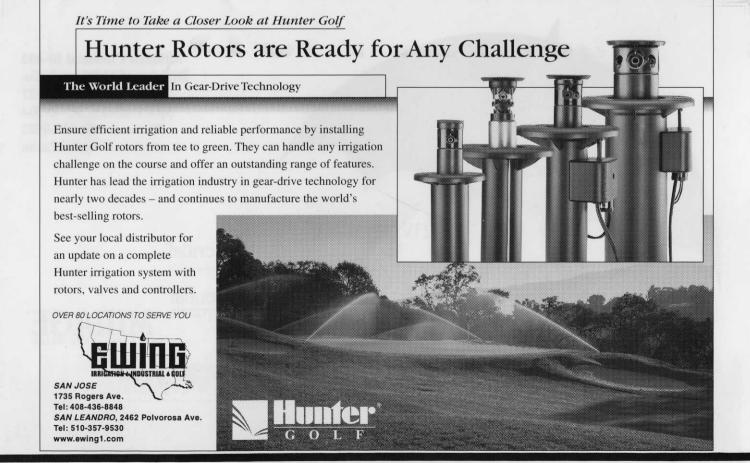
BLENDS: Penncross, Dominant, Hybrid Bermuda, Baby & 419, Blue Rye 50%/50% & 90/10, 100% Rye and 100% Bluegrass SERVICES: Hybrid Bermuda Row Planting, Deep Tine Aeration, Slit Seed, Green and Fairway Top Dressing

800-637-8873

Alan Heath @ 916-768-0132

### "Support your Supporters"

Hunter Industries
Milliken Chemical
West Star Dist.
West Coast Turf
Delta Bluegrass Co.



## **Boardroom Briefs**

- ♦ Affiliate representative **Steve Franzen** reported that all was in order for the upcoming Scholarship Research tournament to be held at Orinda CC on August 21<sup>st</sup>. The morning shotgun will feature a supt/vendor team format, according to Franzen..
- ◆ Santa Cruz has been confirmed as the 2000 Institute site according to Gary Sayre, Education chairman. The Cocoanut Grove will play host to the seminar, which will feature irrigation as the theme. West Coast Turf has been named the sponsor. Sayre also noted that more education is on it's way at the July 18<sup>th</sup> meeting at Oakmont Golf Club. Robert Green, Pat Gross and the NCGA's Mike McCullough will make separate presentations during the three hour educational meeting. Golf will follow.
- ♦ Cliff & Myrtle Wagoner continued to demonstrate their devotion to the association as they presented the board with a compilation of GCSANC meeting minutes from 1932 to 1997. The project, which began in 1996 was recently completed. Also presented to the Board, was a pictorial summary of GCSANC's history, which has been professionally formatted and bound. With the Board's approval, the pictorial will be donated to the GCSAA's historical library by the Wagoner's as they complete a cross country journey to Kansas this summer. The trip has it's own historical significance as they will travel in the family Model A.

- ♦ The Board unanimously approved drafting an amendment to the bylaws that would allow Affiliate Board members voting rights. The bylaw change will be put before the membership at the January Annual meeting.
- ♦ Bob Costa, who has been serving as the Media Director reported that June was an active month for the Media program (see media scorecard) and outlined two events for summer and fall. Ballmark repair week, scheduled for the October 2 9 will feature the distribution of 10,000 ball mark repair tools at the Senior Transamerica event hosted by Silverado. Costa, received approval from the board to purchase the tools and ballmark repair posters, which will be mailed to all Class A and B superintendents. Costa noted that the NCGA had been approached as a partner, but declined participation. The other featured media event will be Turfgrass Awareness Week, scheduled for August 21- 28.
- Dave Davies who had proposed a review of the annual awards selection process will draft a new proposal that will establish the criterion for future recipients. The board will review Davies draft at the July Board meeting.

## BUNKER SHOTS

A mishmash of editorial ramblings by Ken Williams, CGCS

Tiger Woods controlled the ball and his mind to dominate at Pebble Beach. Well almost......He was having difficulty controlling one part of his anatomy when he unleashed some juicy four-letter bombs on #18 tee Saturday morning......I guess he wasn't thinking about all the kids who want to be Tiger Woods!

It's Junior Golf Camp time and Stanford is no exception. The stuff that happens never ceases to amaze me! Controlling the counselors is just as difficult as the kids. I caught one counselor out on the course with his personal car. When he saw the stern look on my face he said, "What's up with you *Brraahh? You'd better chill.*" I had to think back to my So Cal days to answer, "Duuuude, you can't bring your ride out here, Braahh." "It's just not All Good." "You've got to leave your sled at the clubhouse next to all those fossil rigs, Braahh." He said, "No sweat, Brraahh, I just wanted to play some CDs and forgot my Walkman today." Oh, boy.......Generation Next!

How about those \$250 Class A GCSAA dues? It's getting to the point of pricing quite a few individuals out of the Association. Advertising and commercial sponsorship are already overwhelming us. Hey GCSAA, how about reducing some of that overhead in Lawrence instead of raising our dues again?

The GCSANC has one employee (Barb Mikel) to handle the daily needs of over 600 members. She's always got a lot on her plate. Try to follow the rules, treat her with respect and not be overly demanding. For God's sake, we wouldn't want to start acting like our own Club members!

### Vandals Cause Extensive Damage to Turf Seed Research Facility

By Bryan Denson of The Oregonian

An underground group calling itself the Anarchist Golfing Association claimed responsibility for sabotaging experimental grasses at a grass research company near Canby, Oregon, marking the first time that biotech vandals have struck in Oregon. The group claimed in an anonymous e-mail to The Oregonian that it broke into two greenhouses owned by Pure-Seed Testing, overturning and stomping on experimental grass plots, scattering identification tags and spray-painting such slogans as "Nature Bites Back."

Biotech saboteurs have struck experimental trees and food crops more than 20 times in North America since last July, mostly in California, including the arson of the landmark Agriculture Hall at Michigan State University. They have set back research by universities and high-tech agriculture companies in an effort to draw attention to genetic engineering; a science they say is potentially harmful to the planet.

The saboteurs targeted Pure-Seed partly because the company is experimenting with a grass used on putting greens - creeping bentgrass - that has been genetically modified to resist the herbicide Glyphosate, according to the Anarchist Golfing Association's communiqué. "The biotech industry usually hides behind the racist aura of 'feeding the Third World,' but as you can see, it is quite obvious that these crops are grown for profit and the pleasure of the rich and have no social value," the group wrote. "Grass, like industrial culture, is invasive and permeates every aspect of our lives," the note continued. "While the golf trade journals claim that 'golf courses provide suitable habitat for wildlife,' we see them as a destroyer of all things wild."

Pure-Seed president Bill L. Rose condemned the vandalism. Rose said his company would have to swallow the damages because insurance only covered seed and seed stock, not experimental plants. The sabotage destroyed five to ten years of work. "Put a value on that one," Rose said.

According to Crystal Fricker, director of research, they totally destroyed the genetically modified grass experiment and dumped and scattered 200 pots of ornamental grasses collected from around the world. "I think it's ironic they killed so many plants that are naturally bred to be so environmentally friendly," Fricker said. "Our whole goal is to develop varieties that require less input (of pesticides and other chemicals) and that can better serve people around the world."



The Supt/Pro Trophy

Below - The staff at Green Hill put on quite a spread



## The Superintendent/Pro Tournament at Green Hills Country Club

Approximately 60 players participated in the Supt/Pro event at Green Hills. The weather couldn't have been better and Walt Barret had the golf course in flawless condition. A big thanks go out to Walt and the entire staff at Green Hills.

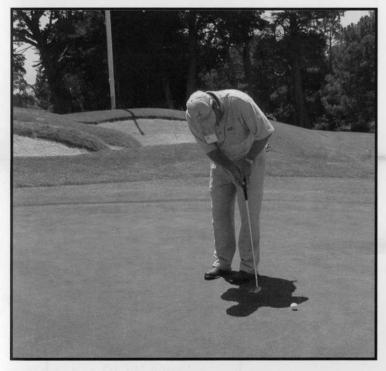
Tournament Results - Superintendent/Pro Best Ball Net

1st Place 2nd Place Gary Skolnik/Byron Cone Fountaingrove Resort 60\* Danny Moak/Eric Wasinger Diablo Grande 60

\*Won scorecard playoff



Entry to the beautiful Green Hills Country Club



Jeff Shafer feathers a slippery putt down the hill.



### WEST STAR DISTRIBUTING, INC.

2438 Radley Court • Hayward, CA 94545-1159

HAYWARD (510) 887-1222

RANCHO CORDOVA (916) 635-3232

## Drainage Solutions

for

## **GOLF COURSES**

from



#### Introducing Perma Panel<sup>TM</sup>

The efficient drainage system designed to function as both collection & discharge in one unit!

- ♦ Easy to install using a common ♦ trencher
- No large crews or heavy equipment needed
- ♦ Low profile of product allows for shallow installation
- Narrow width allows for narrow trench
- ♦ six foot lengths are easily transported

- Easily connected to other drainage pipe and products on today's market
- No need to order "special" expensive fittings to make connections
- Less than half the installation costs of typical "rock & pipe"
- ♦ UPC®Certificate of Listing — meets Uniform Plumbing Code®

For more information call

888/844-0296

www.permacorp.com

