



ASPEN GOLF NAMES KELLY

PHOENIX, Ariz. — Aspen Golf has announced the addition of Kraig Kelly as Southwest region manager. Kelly is based here and will be responsible for providing services in Arizona, Nevada and California. Aspen Golf specializes in the design and construction of golf course water features including lake construction, rock walls and waterfalls, aeration, timber walls and bridges, decorative shorelines and streams. Kelly may be contacted at 602-307-0285.

GOLF RESOURCES CHANGES NAME

DALLAS — The golf course design firm Golf Resources Group has changed its name to D.A. Weibring/Golf Resources Group Inc. (Weibring/GRI) to capitalize on the national identity of 22year PGA professional golfer and company chairman D.A. Weibring. Weibring was one of the founding principals of the company while continuing to play on the PGA Tour, where he won five championships. The Plano resident also won twice overseas. The company has also announced the addition of Steve Wolfard to its design team. He is a former executive with Jack Nicklaus/Golden Bear International, Inc. and Gene Bates.

IMG'S RIELLY MOVES TO SAN FRAN

SAN FRANCISCO — Mike Rielly, senior international vice president at IMG, transferred on July 1 to IMG San Francisco, from where he will oversee IMG's global golf course design business and assume direct responsibility for these activities in North and South America. Rielly has lived in Asia since 1990. He first moved to Tokyo from IMG's world headquarters in Cleveland in order to establish IMG's first Asian real-estate office. Rielly was most recently managing director of IMG Singapore, headquarters for Asian real estate, and managed IMG's real-estate staff in Tokyo, Hong Kong, Beijing, Manila, Jakarta and Singapore.

ERIC WEISKOPF JOINS RODGERS

Eric Weiskopf is the newest member of Larry Rodgers Design Group (LRDG), a golf course irrigation consultant. LRDG opened a Phoenix office in May, managed by Weiskopf, to respond to the demand of existing golf course GPS mapping services. PGA Tour great Tom Weiskopf's son, he was on the golf teams of Ohio State and the University of Arizona, followed by four years of caddying on the PGA Tour, and worked in the construction industry for one year. Weiskopf's office is located at 4408 N. 24th St., Phoenix, Ariz. 85016; phone 602-725-4693.



As shown on Cedarcrest Golf Course's 12th hole above, once the sod is stripped off the fairways, 4 inches of sand is laid atop new drainage tiles. At right is Cedarcrest's 3rd hole after construction.

By DOUG SAUNDERS

ARYSVILLE, Wash. — Strip the sod, lay down drainage lines and 4 inches of sand over the entire course and you've solved the shoulder season scramble in the Great Northwest. That's The World According to John Steidel.

A golf course architect, Steidel had used this procedure, minus the sod-stripping, on a couple of new courses but had never closed down a facility and completely rehabilitated it in this manner. That was until the opportunity came at the municipal Cedarcrest Golf Course here.

"The reason we did this," Steidel said from his Kennewick offices, "was that the financial success of a public golf course mostly concerns how successful you are in the shoulder season — March, April, part of May, and September and October."

The prime advantages of the sand solution, he said, are that the course drains quicker, stays firmer and allows for maintenance work to continue on a more regular basis."

Steidel perfects sand solution in Northwest



"The question is, what happens in the spring when people are watching The Masters and want to golf and it is sunny, but the course is a bog and the balls are plugging," Steidel said. "Here in the Northwest we get 40 inches of rain a year, but we also have 240 days of clouds, which means the golf courses don't get the sunshine needed to dry out. Muddy conditions can be standard in March and April, cutting down on play."

The 75-year-old Cedarcrest is tucked into 120 acres of rolling, tree-covered terrain. For years it was the only place in the area to play, but as new courses opened, the need to improve in order to keep up with the competition became evident.

The city officials' decision to follow Steidel's advice and close the course for a new "topping" came on a sunny day in January 1997 when nearby Lynwood Municipal Golf Course, which

Continued on page 28

Not all 100% sand greens 'California'

By DR. MICHAEL J. HURDZAN

There seems to be a false notion that any golf green constructed of 100-percent sand is a California green. This is incorrect and I will explain why people have experienced such varying degrees of success with pure sand construction.

When someone tells me that they built a California green, the first question I ask



Michael Hurdzan

is "Which lab did the testing to help you select your sand?" Nearly always I am told that no laboratory was used, so my second question is "Then, how do you know it is a California green?" The point

is that not all 100-percent sand greens are true California greens as defined in publication #21448, The Sand Putting Green Construction and Management available from: Publications Division Agriculture and Natural Resources, University of California, 6701 San Pablo Ave., Oakland, CA 94608-1239.

By definition, California greens are made of 100-percent sand that meets the following particle size distribution: 90 to 100 percent of particles with a diameter between 0.1 and 1.0mm; and 50 to 70 percent of particles with a diameter of 0.50 to 0.25mm. Angular to sub-angular shape is preferred. Any sand outside that range may work just fine, but it is technically not a California green — it is a 100-percent sand green.

Continued on page 29



Twin Bridges is architect Bob Lohmann's latest creation.

Twin Bridges opens for play; USGA Seniors visit a month later

DANVILLE, Ind. — Twin Bridges Golf Club, a unique environmental collaboration between Lohmann Golf Designs (LGD), Heritage Golf Management, Waste Management Inc. and Audubon International, has opened for play here outside Indianapolis. One month following a May 29 grand opening ceremony, Twin Bridges played host to USGA Senior Amateur qualifying.

Named for a pair of railway trestles that criss-cross the property, Twin Bridges is owned by Waste Management, the rubbish disposal company which operates a landfill on another portion of the 800-acre property. Bob Lohmann routed the 18 holes so as to skirt the landfill completely. His construction firm, Golf Creations, built the course with help from Heritage, which stayed on to manage the facility.

Twin Bridges was constructed with the utmost environmental sensitivity; it has already earned "Signature" status, the highest designation bestowed by Audubon International (AI). "The course is a real showpiece," said Ron Dodson, president of Selkirk, N.Y.-based AI, a non-profit organization that facilitates responsible golf course development and maintenance practices worldwide. "The work Bob Lohmann has done at Twin Bridges has been so tremendous. He wouldn't even authorize the clearing of site lines until we walked the parcel together. When we had, he went out of his way to maintain natural riparian corridors."

While the sensitive design and construction of Twin Bridges stand as considerable achievements (albino deer have

Continued on page 28

Hurdzan column

Continued from page 27
Unlike the USGA recommendation, there are no performance guidelines for such things as infiltration or hydraulic conductivity rates, percentage of capillary and non-capillary pores, or coefficients of uniformity (CU). Some see this as a weakness. but I do not. I actually see it as a strength because it gives the opportunity to use locally available sands and amend them to whatever performance criteria vou want. "Designer root zones" is what one distinguished soil scientist calls them. Allow me to explain my reasoning.

To begin with, you should realize that the turfindustry has much to learn about root zones and how they perform. It is an evolving body of knowledge. What we think we know today may prove to be wrong tomorrow.

As an example, I cite Dr. Ed McCoy's work at Ohio State University that preliminarily concluded that California greens construction drains down slower that the USGA green construction method under saturated, experimental conditions. This unexpected finding has puzzled some people who always thought California greens were best drained.

Of what practical significance all of this is has yet to be determined. With all of the confusion about what works and what doesn't, how should you decide on which designer root zone is best for you?

I suggest a simple three-step process. Step one: Determine the source of your irrigation water and do some fairly in-depth testing concerning dissolved materials and suspended colloidal particles. If it is at all out of the ordinary, I would suggest sending along five gallons of that water to the sand-testing lab along with your sand samples so they can do sand selection using your irrigation water. Believe me, this can make a big difference in long-term performance.

Step two: Choose which turfgrass you are going to use on the greens and the possible stresses that may be aggravated by the quality of the irrigation water. For instance, suppose you choose an upright variety of bentgrass for the mid-South, and you find the irrigation water will be effluent that has fairly high salt content. Intuitively this should cause you some alarm—bent, mid-South, salty water, mid-summer.

Your first choice would be to change the source of water to fresh water. But assuming you cannot, should you change to Bermudagrass putting turf

Dr. Michael Hurdzan is a principle in Hurdzan Fry Golf Design and holds a PhD in environmental turfgrass physiology.

which may better endure those stresses, or go to a very open root-zone architecture?

Or let's suppose you are on a course in the Northeast that wants to use one of the new, very fine-blade, very dense, upright bentgrasses, and the irrigation water is perfect and abundant. What material will you use to top dress these greens, that can get down into the very dense canopy, but yet not cause a perched water table by layering fine top dressing over a coarser root zone? In

this case, the turfgrass is determining the top dressing, which is then dictating the root zone.

In these and many other examples the correct answer may be "designer root zones."

Step three: Select the best root zone, given the information you found in step one and two.

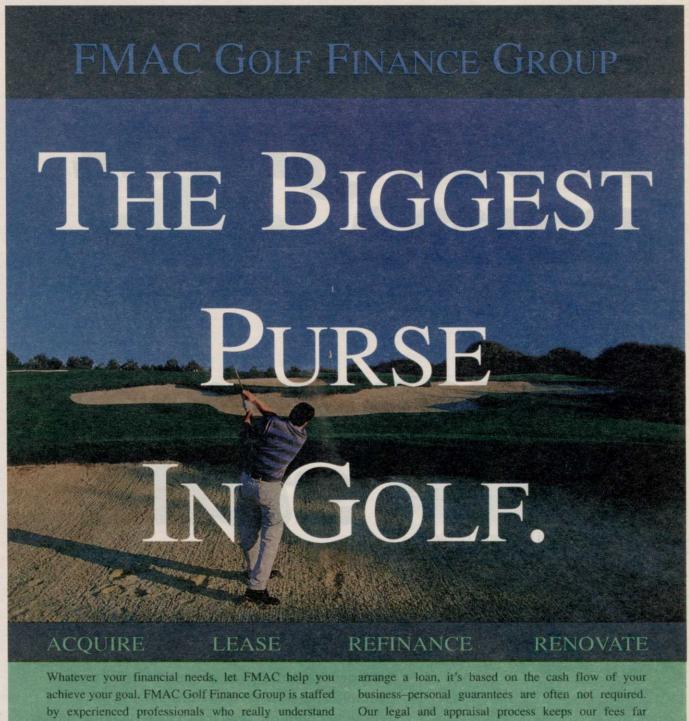
California greens or sand modified with organic or inorganic amendments give you those options and a wide range of flexibility.

How do you determine which

method may be best suited for you? The answer is to test and study, ask questions and listen, and deal with a testing laboratory that understands and endorses various methods of green construction and cares about your situation. Stay away from the lab that seems to know about only one or two ways to build greens, and that simply dismisses any idea of a "designer root zone.

This lab may do just fine for routine and conventional testing, but lacks the expertise to find the method best for your situation. Of course, I recommend a USGA-certified lab, but don't rely on that certification alone. If you need more help, talk with me personally.

Lastly, I again suggest building your own test plot. Try out what seems to be your best options and compare their results. Be bold and test the limits of a concept, not just the middle ground. Remember, this is soil science, not rocket science.



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