

CHALKBOARD

TIPS FROM THE PROS

RANCHO SANTA FE LINKS PAST AND PRESENT

Heavy earth-moving and grading machines were several hundred years away from invention when golf was first played in the 15th and 16th centuries on the rolling, sandy linksland of Scotland, so the early golfers left course design to Mother Nature herself. On an early links course, the sequence of holes was dictated by the natural environment. Hazards, such as bunkers and roughs, were already "designed in." Nature took care of irrigation.

Unfortunately for the golf course architects, designers, and superintendents of today, Nature's irrigation schedule is less than predictable. In fact, many areas of the country are battling a drought.

California has been particularly hard-hit by four consecutive years of below-average rainfall. As it enters the summer of 1990, the "Golden" state is in danger of turning brown. Water conservation, which has always been a wise idea, is becoming imperative.

Conserving this precious resource was at the heart of the design and construction of Rancho Santa Fe Farms Golf Club, located around an upscale residential housing development in the rolling hills just north of San Diego, CA. Called "The Farms," this private, 18-hole links-style course was designed by Pete and Perry Dye of Dye Designs to take advantage of the natural terrain and foliage of that semi-arid region. What's more, this natural approach to course layout was augmented with state-of-the-art hydroseeding and hydrostolonization of the course's greens, fairways, and roughs by Hydro-Plant of San Diego.

Founded 11 years ago by Gary Weems, Hydro-Plant has planted courses in areas such as Las Vegas, Palm Springs, and Hawaii. The firm also works on freeway, development, erosion control, and other projects. Weems, who serves as company president, has more than 20 years of experience in the hydroseeding and hydrostolonization industry.

In the summer of 1988, Hydro-Plant was



Nine different drought-tolerant native grasses were hydroseeded in the rough.

contracted by Ronnie Holden, The Farms superintendent at that time, to hydrostolonize one-third of the course's fairways and to hydroseed its roughs, in areas that were inaccessible to mechanical seeding and stolonizing equipment. Holden was quickly impressed with the establishment time and quality on the fairways, and soon Hydro-Plant had taken over the hydrostolonization of all the fairways, as well as the greens. The fairways were established with Tifgreen hybrid bermuda and are not overseeded during their short dormancy period. The greens were hydroseeded with Penncross bentgrass.

"Hydrostolonization was more successful because of the mulch," Weems explains. "It retained moisture, and that really is the critical factor for the newly planted stolons. We used Spray Mulch, from Pacific Wood Fibers, which is genuine wood fiber. I'm a strong advocate of using wood fibers, because they interweave and form a 'mat.'"

To hold the slurry together, which included a 16-20-0 fertilizer at 300 pounds per acre, Hydro-Plant used M-Binder tackifier from Ecology Controls.

Although mechanical planting had resulted in faster rooting, Weems says, many of the stolons broadcast onto the soil were not covered by the machine's disk and died. With hydrostolonizing, rooting took longer. But fewer stolons dried out because of the mulch, more of them rooted, and



Hydro-Plant uses Bowie unit to hydrostolonize fairways with Tifgreen hybrid bermudagrass.

establishment was quicker. Weems' observations were supported by earlier tests conducted by Hydro-Plant and Pacific Sod, which supplied the stolons for The Farms.

To hydrostolonize the fairways, Hydro-Plant used a Bowie 3,000-gallon Hydromulcher, which Weems modified with a positive displacement pump. "I added a positive displacement pump to the unit's centrifugal pump for hydrostolonization, because it helps push the material through the pump without slippage. Stolons tend to become heavier and more 'solid' in the slurry," he explains. "We also use the same hydromulcher-and-pump combination when we're hydroseeding and we have 600 or 700 feet of hose for the material to pass through."

While Hydro-Plant did not perform the ground preparation prior to planting, its importance is not lost on Weems. "Every situation and soil type is different," he says. "Hydroseeding and hydrostolonization are

only vehicles to get seed and stolons on the ground. They do not make soil preparation unnecessary."

Hydroseeding was performed on the course's 50 acres of roughs, using a combination of nine drought-tolerant grass seeds supplied by S & S Seed of Santa Barbara, CA. The seed mix was created by Jerry Fischer of Stone-Fischer and Associates, a landscape architecture, urban design, and master planning firm in San Diego, which also worked on The Farm's clubhouse landscaping. The company is currently working on Heritage Country Club, not far from Rancho Santa Fe.

"We were contracted by Dye Designs to create a seed mix for the rough areas of The Farms because they weren't familiar with the horticulture of this area," says Fischer. "They gave us pictures of what they wanted, and we selected the grasses."

Among those included in the mix were Blando Brome, Zorro fescue, weeping lovegrass, and fountain grass and Buffalograss. The roughs require very little upkeep aside from periodic removal of their dead undergrowth.

"I've never seen a seed mix put together like that," says Weems. "When Jerry called me to discuss it, I thought he was crazy! But they got the result Dye wanted."

However, Fischer's selection had to meet with more than Dye's approval. The drought-tolerant seed mix had to be approved by the San Diego County Planning Office. "Almost everything in a development has to go through some form of an approval process," Fischer explains. "We spent at least one-third of our time getting county approval. Developers spend months, even years, going through the approval process. It's a very long, somewhat harrowing experience."

Tommy Jacobs, The Farms club pro, is also familiar with the development approval process. "We have a small lake on the course, and we had to work closely with the California Department of Fish and Game to ensure its preservation," he explains. "By expanding the original lake and creating two more we are able to capture 98 percent of the water runoff on the course."

To complement this water-efficient course, a Toro 8000 irrigation system was chosen. The system's computer-driven sensors automatically monitor the environmental moisture content at several stations around the course. This allows for pinpoint adjustments and eliminates overwatering.

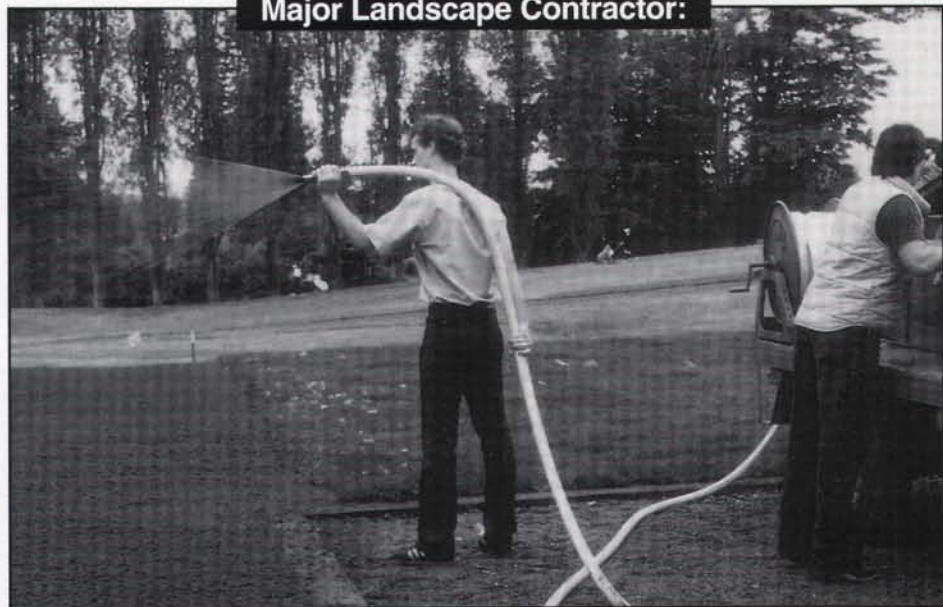
Rancho Santa Fe Farms Golf Club is a

Rancho Santa Fe Farms is a perfect example of what can evolve from blending the new with the old to solve an existing problem.

perfect example of what can evolve from blending the new with the old to solve an existing problem. By linking such relatively recent technologies as hydrostolonization of drought-tolerant plants and computerized irrigation with the time-honored links design concept, a course has been created for the conservation-minded present and future.

"I think you're going to see a lot more drought-tolerant plants used in hydroseeding and hydrostolonization," says Weems. "We're working with people on new things all the time."

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