



# Pelican Hill, nature's partner

*Don Hoos explains how these coastal California courses were designed and built with the wildlife in mind.*

*They're irrigated with reclaimed water, and much of the acreage wasn't touched.*

by Steve and Suz Trusty

**"E**nvironmental issues will continue to play a bigger and bigger role in what golf course superintendents do and how we approach things," says Don Hoos, director of agronomy for Pelican Hill Golf Club near Newport Coast, Calif.

"The 400 acres of Pelican Hill were part of a huge area of ranch land which The Irvine Company owns and has developed in stages. It took them seven or eight years to work through the planning and approval processes to get the okay to begin construction. Environmental issues have been a top priority from the planning stages through course construction and in our maintenance practices."

Pelican Hill is an environmentally sensitive area. A popular surfing beach is on the stretch of Pacific Ocean adjacent to the complex. Crystal Cove State Park is nearby.

Two challenging, beautiful and decidedly differ-

ent golf courses lie within Pelican Hill—the traditional tree-lined Ocean Course and the Links Course, more reflective of the native California landscape.

Hoos notes that only 200 of the 400 acres of Pelican Hill are in turf. And, while provisions of the original agreement called for 13.7 acres of California coastal scrub as habitat for the gnat catcher, an endangered bird species, the native plant material was integrated into 40 acres of the Links Course design. Also, many natural areas were left undisturbed during construction.

#### **State-of-the-art irrigation**

Both courses irrigate with reclaimed water from the local Irvine Ranch Water District. Each course has a separate Rain Bird Maxi computer-controlled irrigation system, and its own weather station to supply the evapotranspiration data on which irrigation is based. Turf and native areas are irrigated separately. Because the native soil is heavy clay, water is applied in small amounts at a time, with the cycle repeated as necessary for optimum moisture levels.

Hoos says, "The Irvine Company set up a monitoring program for storm water runoff which measures for pesticides, nitrates, and any other kind of pollution that could possibly run off from a golf course. The program is entering its fifth year and, to date, there's been no measurable discharge from the courses."



### One step ahead of regs

Pelican Hill complies with, and strives to stay a bit ahead of, the stringent California pesticide programs and regulations.

"The state agencies have done a very good job overall of implementing these regulatory programs. They took the educational approach, setting up the parameters, taking steps to insure that those affected understood the programs and regulations, and giving us adequate time to comply. I think it's been a much more effective way to bring people into compliance and get them focused on environmentally compatible practices than just establishing the regulations followed immediately with non-compliance checks and fines."

### A watchful eye

Hoos points out that many issues of community concern revolve around initial development and construction of golf courses. Each community wants to insure the course will not adversely affect the environment, or the residents' quality of life.

Once the course is completed, members of the community immediately surrounding it keep a watchful eye on changes in course design, removal or replacement of trees, shrubs and other landscaping features, irrigation patterns and applications of fertilizers, fungicides and other pest control products. Though golfers' concerns center more on the playability of the course, environmental factors are an issue.

"When people see spray tanks out on the course and operators in protective clothing, they wonder if they should be protected too, and if what's taking place is dangerous. Open communication outreach programs can help address these concerns."

Looking to the future, Hoos says, "I think the turfgrass breeding based on genetics is going to be exciting as more information becomes available about DNA and the location of the different genes that control different parts of the plant. I'm sure the major emphasis will be on food and fiber. But I hope this industry will also benefit and we can see some improvements in



Hoos: open communications with the public, improved interview process and a more thorough background check procedure for perspective employees have lowered turnover.

turfgrasses for disease resistance, insect resistance, cold hardiness and more. That will make our jobs easier and we'll have less reliance on pesticides."

### Thoughtful hiring

On-course environmental programs need the full support of crew members. Yet, the future is sure to hold the same employee challenges which are now a constant on golf courses across the United States. Pelican Hill has a current employee turnover rate of from five to 10 percent. Hoos notes that an upgraded interview process and a more thorough background check procedure for perspective employees has helped bring them to that rate.

"We also participate in a pilot program with the INS (Immigration and Naturalization Service) to verify the validity of applicants' green cards, to make sure they are authorized to work in the U.S. We make people aware of that when they come in to interview for the hiring process. It does discourage illegal aliens from applying for jobs. This saves us time upfront and problems later on.

"By concentrating on hiring good people, we've also been able to step up our training programs because crew members

are more receptive and respond better to the training. Greater competence levels in our personnel has helped us to adhere to maintenance procedures and policies and to reduce our overall maintenance costs."

Hoos commends efforts to promote the professional image of the superintendent. He gives much credit to the Golf Course Superintendents Association of America (GCSAA).

This past November Pelican Hill was the site of the 10th annual John Deere Team Championship Golf Tournament. The event brings together teams comprised of a course superintendent, pro, club manager and club president. A John Deere representative joins the team for the finals.

Adds Hoos, "Superintendents today are more focused on the big picture of how our courses are perceived by golfers, the community and the public. We'll need to incorporate all the education, training, resources and technology available to keep our courses and our role as superintendents in a positive position on environmental issues in the future." □