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REVIVING Resort Courses

Kaanapali Resort's North and South courses were in need of CPR to win back visitors to the popular Maui destination

By Heather Wood

The courses of Kaanapali Resort sit in a prime area to attract golfers. Located in the middle of several Maui resorts, the oceanfront courses are surrounded by about 5,000 hotel rooms. Yet, until recently, they didn't generate a stellar number of rounds because no one seemed to want to play them.

The resort features two courses: the Championship Royal (North) Course and the Kai (South) Course. Robert Trent Jones Sr. designed the par-71, 6,700-yard Royal Course in 1962. Created as a championship course, it had gotten to a point where it could no longer be described that way. It hadn't been maintained properly until recently.

The Kai course conditions deteriorated, too. It was originally created as an executive course but was later redesigned by architect Arthur Jack Snyder in 1976. At 6,400 yards, the par-70 course was a breeding ground for goosegrass.

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COURSE CONSTRUCTION



The renovation of the Arthur Jack Snyder-designed Kai (South) Course included new tees, trees and bunkers to create a safer layout. Photo: Kaanapali Resort

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The asset management group that owned the courses hired management company Billy Casper Golf to operate the courses and oversee \$13 million of renovations to the courses, clubhouse and pro shop. BCG has a relationship with golf course architect Robin Nelson, who's been involved in the layout or redesign of many courses in Hawaii, so the choice to bring him on board wasn't difficult.

One at a time, the courses closed as they underwent a transformation that would bring them back to resort-level conditions.

STRATEGIC MOVES

Safety was a factor in the South Course redesign. Houses had been built around the course since it opened, and some were too close to the fairways. So, Nelson moved tees and added trees and bunkers to create a safer layout.

All the bunkers on the South Course were rebuilt and reshaped. A few were removed, and a few were added.

"You need to place the shot more accurately now because the bunkers are closer to the greens to make it more interesting," says Daniel Ramos, president of DHR Construction, one of the subcontractors that worked on the renovations.

Nelson added new tees to suit a variety of skill levels better, bringing the total on each hole to four. But even with new tees, the focus remains on hitting the shot properly rather than hitting the ball a great distance. Adding to the challenge is the fact that several greens were redesigned to allow more pin placements.

Additionally, contractors installed a new irrigation system on the South Course and improved the drainage in the bunkers.

A CLEAN SLATE

The Robert Trent Jones-designed North Course was a different story. Changes to the course weren't as drastic as those made to the South Course.

"I didn't want to modify the course – just resurrect it back to its natural state," Nelson says.

It was obvious, though, the greens on the North and South courses would have to be regrassed.

"There were more weeds than grass," Nelson says. "You couldn't putt without the ball bouncing a few inches in the air."

The greens were resolded with TifEagle hybrid bermudagrass, which is a smoother and faster putting surface than than Tifdwarf, the grass that was on the greens previously, Nelson says. The new turf was significantly faster, causing the crew to reshape some of the greens to slow them down slightly.

The tees and fairways were planted with 419 hybrid bermudagrass, a dense variety that allows for lower cutting heights and quicker recovery time. Course superintendent Craig Trenholme intends to keep the turf this way. He wasn't around during the redesign, but he had worked at the course 10 years earlier and kept a close eye on it during the renovations when he worked at a course five miles down the road. Trenholme returned just after the courses reopened.

Trenholme uses cultural practices for the ongoing prevention of another significant goosegrass infestation. He made changes to the courses' fertilizer program and regularly verticuts the greens and aerates them. He also applies preemergent control.

"After the goosegrass died on the South Course, it had to be pulled out

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AT A GLANCE Kaanapali Resort

Location: Lahaina, Maui, Hawaii Web site: www.kaanapali-golf.com Type of project: Restoration of the **Royal Kaanapali Course and** renovation of the Kaanapali Kai Cost: \$13 million Courses closed: Kaanapali Kai Course, April 2005; Royal Kaanapali Course, April 2006 Courses reopened: Kaanapali Kai Course, November 2005: Royal Kaanapali Course, December 2006 Architect: Robin Nelson **General contractor: Quality General** Subcontractor: DHR Construction Superintendent: Craig Trenholme Greens: TifEagle hybrid bermudagrass Tees and fairways: 419 hybrid bermudagrass manually because the clumps were so big," Trenholme says. "When the Royal Course was grown in, there were a lot less weeds to deal with than the Kai Course. It was easier to control."

Another aid keeping the turf healthy was the addition of cart paths. DHR installed wall-to-wall cart paths on the courses to combat the stress carts cause on the turf.

"First we put the path only near the tees and greens on the South Course, and we installed it wall to wall on the North Course," Ramos says. "We then realized we needed to make the South Course path wall to wall."

ROUGH PATCHES

DHR ran into a slight delay at one point when the crew's sand mixer broke. Normally this leads to only a minor delay, but Maui magnifies construction problems. Many times, a piece of equipment is the only machine of its kind on the island. "On the mainland, if something breaks, you can buy or rent another one," Ramos says. "Here, if it breaks, you have to do without it or wait about six weeks until it's fixed. Many times you call your competitors to ask them to lend you a piece of equipment."

It's such a common occurrence on the island, it barely fazes Nelson anymore.

"It's old hat," he says.

The fact that most materials cost more in Hawaii than they do in most other states – including irrigation equipment and fuel – doesn't help the situation. To make up for these costs, green fees in Hawaii usually are higher than elsewhere, Nelson says.

The other challenge Ramos faces is finding enough labor. He has a crew that can do the job, but room and board on the island is expensive and sometimes difficult to come by. He has to find the right balance of hiring his own crew members and local labor.

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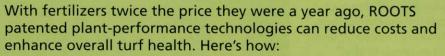
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180 DEGREES

The two courses went from being avoided four years ago to generating record numbers of rounds presently.

"They get high green fees, and they can't accompany all the people that want to play there," Nelson says. "It's been a huge success for them. Before, they couldn't get people to play."

The Royal Course hosted the Wendy's Champions Skins Game in February, and it received at least one glowing review.

"The greens were the best greens I've seen in my life," Nelson says. "They were so fast, so true and quite nice. Especially in Hawaii, with warm-season grass, it's difficult to get the greens like that."

The updated courses have received wider exposure via The Golf Channel. Viewers could catch glimpse of the course in its show, The Big Break Kaanapali, which ended in July. The reality show featured women golfers facing off Changes to the Robert Trent Jones-designed Royal (North) Course weren't as drastic as those made to the Kai (South) Course. The Tifdwarf greens were resodded with TifEagle. Photo: Kaanapali Resort



attempting different challenges.

The only work yet to be finished on the Kaanapali courses is along the shore. Permits

are needed for any work that's done near the shoreline area, and the resort is waiting for final permission. **GCI**



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Research

BY MICHAEL J. HEALY, PH.D.

Toxin trail

Four seemingly unrelated events lead to an unexpected scientific discovery

The word serendipity is used to describe the process by which seemingly unrelated observations, conversations and communications unexpectedly lead to what a scientist or inventor considers a eureka moment. I've had only two eureka moments in my career, separated by about 40 years of mundane routine. My latest eureka moment came as the result of a four-part serendipity.

EARLY FINDINGS

In late January 2006, I traveled to Northern Indiana to visit Agdia, a company I'd done work for during the early 1990s. I met Chet Sutula, Ph.D., who founded Agdia in his basement 25 years before and who was proud of becoming one of the world's largest developers and manufacturers of plant pathogen diagnostic test technology, with 50 employees and a six-acre complex of buildings.

At the end of my tour and dinner, almost as an afterthought, Sutula described a test the company was working on to determine a toxin produced by blue-green algae (cyanobacteria) in drinking water. The test was sensitive to 10 parts per billion, and Agdia's goal was to get its sensitivity down to 1 part per billion. Because the test didn't fit the company's standard product line of plant pathogen

Left: Heavy cyanobacterial accumulation near an irrigation pond inlet testing positive for microcystin toxins. Photo: Mike Healy

Above: Heavy build up of terrestrial cyanobacteria (blue-green algae) in a badly damagaed turf area testing positive for microcystin toxins. Photo: Mike Healy

