TO BUILD AND PRESERVE

Protecting the existing environment must be a major concern when planning a golf course expansion project. It's not an easy task, but an important one, as these planners recently found out.

by Jack Simonds, contributing editor

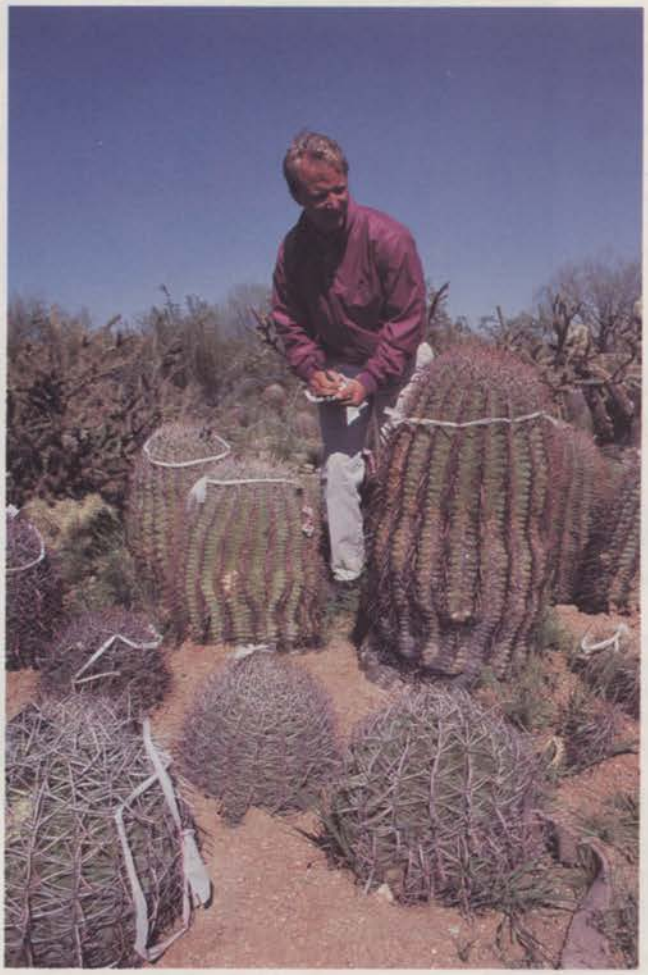
The Boulders, a $50 million showcase resort by Westcor—nestled on 1300 acres north of Phoenix—commissioned a nine-hole expansion last summer of its "target style" 27-hole course. It meanders through Ansel Adams-like rock formations and desert land marked with the unique saguaro cactus.

"To go in and match a golf hole to the natural terrain is the real challenge. More time was spent on that than will be to build the actual golf course," says project manager John Miiller.

Miiller relates how great pains were taken to gently remove mesquite, paloverde, prickly pear and acacia cat claw trees, hedgehog cactus and ocotillo shrubs to temporary nursery sites. The terrain's signature saguaro cactus plants, found only in the Sonoran Desert, were moved and transplanted once to areas out of golf play.

The precious and fragile nature of the saguaros made it necessary for only one transplant, project horticulturalist Dave Hutchinson believes.

"When we're dealing with something as fragile as the saguaros, we like to move them just once," Hutchinson says. Some of the majestic plants are up to 300 years old.



Marc Snyder takes a "cactus inventory." The plants are moved once and once only.

Working from nature's blueprint

Hutchinson, Miiller and course superintendent Marc Snyder began the work by taking inventory of all plant life in the area, noting the contours of the land for wash crossings and high ground to set up natural drainage.

"We just use the natural contours that exist," Snyder says. Rainwater collects at those wash crosses, and a few figure into the play of a hole.

An underground Rain Bird system provides irrigation in peak dry seasons. The state-of-the-art equipment closely monitors water use in a state with fairly strict water allocation restrictions. Submerged sprinkler heads deliver water in dry times.

"When we first started, we looked at the land and selected it first," says Miiller. "We decided: 'Here is where a green would fit; here is where a fairway should go; here is where it makes sense to do some planning from a desert standpoint."

Snyder agrees: "We have man coming into nature and building this (resort and golf) community. We want to live in harmony with nature and be sensitive to the environment. In everything we do, we want to be consistent in man and nature living in harmony. As a golf course superintendent, I'm proud of that."

Finding room for fairways

Course designer Jay Morrish also saw the advantage to incorporating rock formations and wash crossings into the expansion, but a bigger problem vexed him during several months of early design work.

"The big challenge for me was to determine how to get another nine holes in the site and be able to tie it all together," says Morrish, a Tulsa, Oklahoma course designer who works both solo and with professional golfer/course designer Tom Weiskopf. The problem, Morrish says, is that The Boulders complex—packed with 136 guest houses, two swimming pools, tennis courts, restaurants and other fineries—had not included more fairways in its original land plan.

"But now everything looks good and I'm very excited about it," Morrish says.

When plants are put back, Hutchinson notes that only vegetation indigenous to the High Sonoran region is included.

"There will be no new species

whatsoever," he vows.

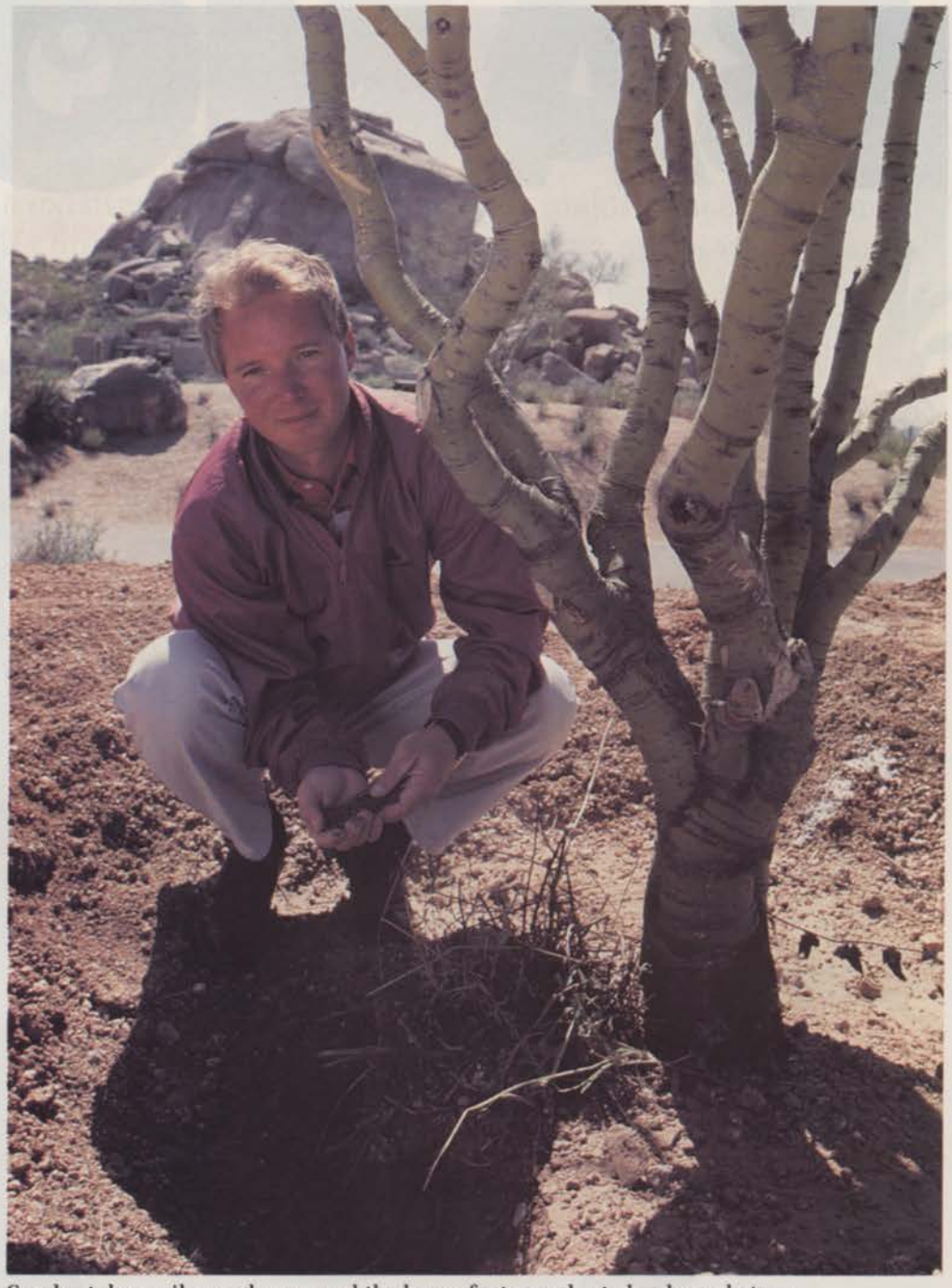
And the course itself?

"The best description I can give," Snyder says, "is that it is more of a target golf course. When you tee off, you cross an area of desert to get back to grass."

Most of the holes are islands of tees, fairways and greens; a few are complete in the traditional sense. Fairway landing space is about 300 to 400 feet across. Hazards include standard bunkers to give the hole shape. The austere rock outcroppings that give the area its haunting beauty and the exclusive resort its name also serve as challenging traps. Those outcroppings were formed 12 million years ago.

"The outcroppings and boulders fit right into the natural design," says Snyder. "We use them to our benefit."

Finish grading and grassing programs began in April; the new nine will open in mid-September. Grassing itself is a mixture of varieties and maintenance programs.



Snyder takes soil samples around the base of a transplanted paloverde tree.

Bermuda, rye and bentgrass

Snyder explains that fairways and roughs are seeded with a bermudagrass and overseeded with perennial ryegrass during peak dormant season in winter. Bentgrass is used on greens.

Snyder and his 36-man crew also maintain a 45-foot lip of desert around all green areas which serves as a buffer between playing surfaces and the Sonoran Desert proper.

"If someone hits it in there, they can play it out," he says, likening the buffer to out-of-play forest bed areas found on traditional golf courses.

"We don't want it to be too manicured. We just want that natural look and the manicuring we do is blended in with the desert that we don't maintain," Snyder says.

That 45-foot lip is maintained by pruning programs, plantings and timed pre-emergence herbicide sprayings. After that, the buffer is left to "Mother Nature taking its course," says Snyder.

Regional animals remain

All connected with the expansion agree that close care has been taken to insure the desert beyond is not disturbed. Wildlife like deer, coyote and hawks still call it home.

"When we're finished, we won't have to go in and repair the desert. We've changed only what we needed to change," says Snyder.

Hutchinson agrees: "We've made it so that revegetation by and large is not necessary. We're using those plants to create a habitat and maintain the integrity of the desert while adding to the experience of golf."

The Boulders Sonoran Desert resort itself has been designed to blend with the surrounding outcroppings and has received the 1990 Small-Scale Commercial/Retail Development Award for its planning design among other awards. About 90 percent of resort-owned land remains undeveloped. **LM**