Perched on lava cliffs overlooking the Pacific Ocean sits the sprawling Kona Surf Resort Hotel in Hawaii. It's the determination of landscape supervisor Ray Berg that coaxes the lush landscape from the unyielding lava rock to produce one of the island's most beautiful landscapes.

"Lavascape" Landscaping

by Maureen Hrehocik, managing editor



R ay Berg has a big "clay pot" to grow his landscaping in—an 11acre clay pot to be exact.

That's what the supervisor of the Kona Surf Resort Hotel in Kona. HI, likens having to coax plants to grow in almost solid lava rock. But, at the Kona Surf. Mother Nature hasn't left Berg with much of a choice.

He admits he likes the challenge in fact he says he thrives on finding different or unique ways of doing things. Landscaping the Kona Surf has supplied Berg with an almost limitless "laboratory" in which to experiment.

"Lavascape"

Ray Cain of Belt Collins Associates designed the landscaping for the 550room hotel which is perched on cliffs of lava rock on the Big Island of Hawaii.

Cain and Berg together chose the actual plant types.

"Our major problems in starting out with this project were salinity, the



Ray Berg checks his containerized stock.

wind, labor and a place to get the plants we wanted," says Cain. Even erosion stakes were hard to keep in place because of the wind when construction first began.

Cain had 5,000 tons of soil brought in as a base to start more eye-pleasing vegetation growing in and among the black lava rock. There were so many weed seeds in the soil that one worker's job in the three months prior to the hotel's opening was to pull Bougainvillea blooming among the black lava rock and well-manicured pathways add to the Kona Surf's tropical beauty.

weeds. Plants were shipped in from Oahu. Anywhere the rock showed any crevices, dirt was added, a plant and then stones to keep the plant from snapping off in the wind. And then plenty of water.

Remarkably, most of the plantings took. Today, it looks as if the plants are growing (and thriving) right out of the rocks. The brilliant purple, pink

The backbone of landscaping in Hawaii is water.

and red bougainvillea and deep tropical greens against the black rocks create the kind of scenery the Hawaiian islands are famous for. For Berg, they create a low-maintenance landscape.

"The backbone of landscaping in Hawaii is water," says Cain. "It's very precious and is a major consideration in any landscape design here.

Salinity and wind are also problems that can't be solved; just worked around."

A particularly bad storm in January drove the ocean crashing in onto the cliffs on which the hotel is built with such force that the salt spray yellowed the palm fronds and the bermudagrass turf along the hotel's ocean walk.

"The elements are vicious here." says Berg, "but they're also forgiving. In a few weeks the grass will green-up again."

The normal 900 to 1,500 parts per million of sodium in the water can climb as high as 2,000 ppm.

"That's another reason why water

is so important to us," explains Berg. "We have to leach the salt out of the soil by watering."

The storm also washed out a pond on the hotel grounds that Berg had just completed.

"It does get discouraging when you work long and hard on a project and it gets destroyed in a matter of hours," Berg says.

But, almost as quickly as Mother Nature can destroy things, she can give them back.

"It's surprising how fast plants establish here."

Plant types

The different types of plants that grow on the grounds of the Kona Surf could fill a book. A sampling includes: sea grapes, philodenrons, kiave, African tulip trees, poinciana trees, macadamia nuts, puma, papaya, breadfruit, tamarind, rheodiscolor, impaciens, cat's claw, frangiapane, mango, bananas, coffee trees, silver buttonwoods, dresina marginata, ginger, ti plants, variegated hibiscus, portulaca, bougainvillea and 35 different types of palm trees. Many of the plant types are the same as those that grow well on Florida's Gulf coast. In Hawaii, though, the plants become more lush.

Berg has been with the hotel since it opened 14 years ago. He lives on the hotel property in a house on the ocean. It's his own backyard that provides ample opportunity to experiment and improve on different plants. Some of them, like wedelia, he integrates into the hotel landscaping; others he grows for his own enjoyment. He changed the wedelia in one part of the hotel three times to get it just the

Whatever nature throws Berg's way, he's seemed to outsmart. What he can't outsmart, he replaces.

way he wanted it.

"You may not see it right away, but if you look hard enough you can see different ways of doing things," he says.

Where the original homesite stood on the hotel grounds, Berg created a patio area that's one of the more popular quiet spots for hotel guests. Another reason Berg experiments at home is that he can't always find what he wants at local nurseries. Nurseries in Hawaii are limited and most of the time can't deal with the volume or types of plants Berg needs.

Maintenance schedule

Berg has a crew of 10 year-round and as many as 14 during the summer months. Two of his crew are scheduled to care for the hotel's interior plantings. Because the Kona Surf is in the process of being sold, Berg's budget hasn't been increased.

Hotel guests and a healthy supply of mongoose give the bermudagrass a good workout, as does the sun. It's still the storms, though, that wreak the most havoc with the turf.

Berg maintains a daily maintenance schedule. Fertilizing is done three or four times a year with a 16-16-16 mixture after the bougainvillea blooms. Macadamia nut shells provide an indestructible mulch for beds and under trees.

"We only use them away from the hotel, though, because they tend to attract ants," explains Berg.

Whatever nature throws Berg's way, he's seemed to outsmart. What he can't outsmart, he replaces. **WT&T**

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