

and is criss-crossed with hollow lava tubes, making it inherently unstable. As these massive amounts of rock accumulated, their bases were crushed under the weight of subsequent lava flows, causing their summits to sink back into the sea.

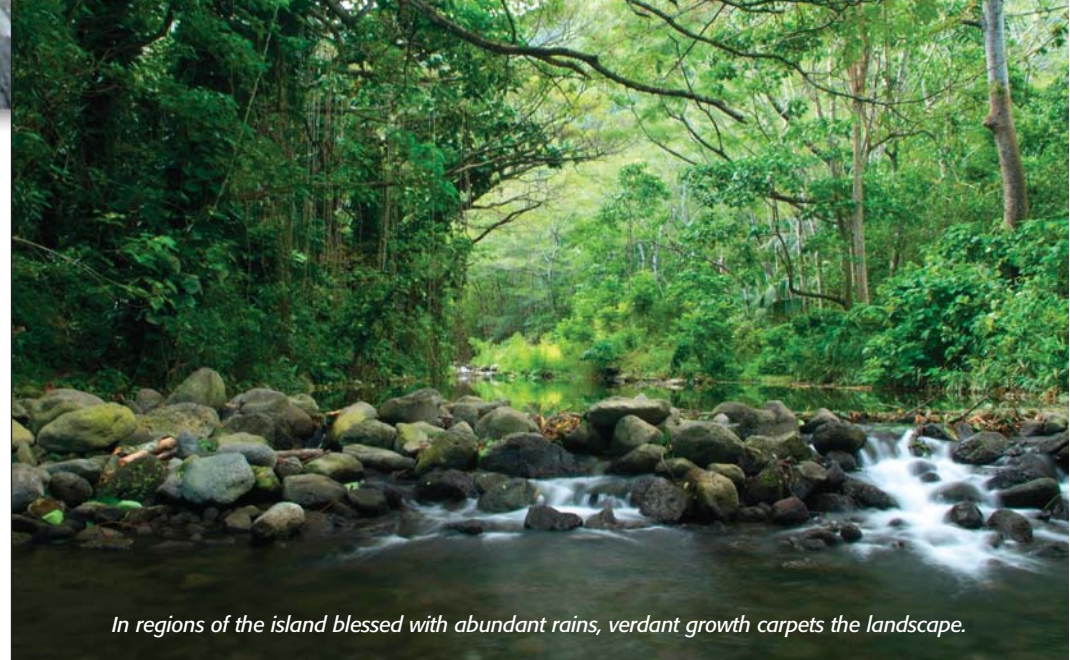
What we call the Hawaiian Islands are simply the latest creation from this island-making machine. Someday they will disappear, existing as nothing more than footnotes in the Earth's turbulent geologic history.

Kaua'i and Ni'ihau are the oldest of the eight major islands. Lush and deeply eroded, the last of Kaua'i's fires died with its volcano a million years ago. O'ahu, Moloka'i, Lana'i, Kaho'olawe—their growing days are over, as well. Maui is in its twilight days as a growing island. After growing vigorously, Hawaiian volca-

*The wonder of creation can still be seen at night at Kilauea Volcano.*

noes usually go to sleep for a million years or so before sputtering back to life for one last fling. Maui's volcano Haleakala has entered its final stage and last erupted around 1790.

The latest and newest star in this island chain is Hawai'i. Born less than a million years ago, this youngster is still vigorously growing. Though none of its five volcano mountains is considered truly dead, these days Mauna Loa and Kilauea are doing most of the work of making the Big Island bigger. Mauna Loa, the most massive mountain on Earth, consists of 10,000 *cubic miles* of rock. Quieter of the two active volcanoes, it last erupted in 1984. Kilauea is the most boisterous of the volcanoes and is the most active volcano on the planet. Kilauea's most recent eruption began in 1983 and was still going strong as we went to press. Up and coming onto the world stage is Lo'ihi. This new volcano is still 3,200 feet below the ocean's surface, 20 miles off the southeastern



*In regions of the island blessed with abundant rains, verdant growth carpets the landscape.*

coast of the island. Yet in a geologic heartbeat, the Hawaiian islands will be richer with its ascension, sometime in the next 100,000 years.

These virgin islands were barren at birth. Consisting only of volcanic rock, the first life forms to appreciate these new islands were marine creatures. Fish, mammals and microscopic animals discovered this new underwater haven and made homes for themselves. Coral polyps attached themselves to the lava rock and succeeding generations built upon these, creating what would become a coral reef.

Meanwhile, on land, seeds carried by the winds were struggling to colonize the rocky land, eking out a living and breaking down the lava rock. Storms brought the occasional bird, hopelessly blown off course. The lucky ones found the islands. The even luckier ones arrived with mates or had fertilized eggs when they got here. Other animals, stranded on a piece of floating debris, washed ashore against all odds and went on to colonize the islands. These introductions of new species were rare events. It took an extraordinary set of circumstances for a

new species to actually make it to the islands. Single specimens were destined to live out their lives in lonely solitude. On average, a new species was successfully deposited here only once every 20,000 years.

When a volcanic island is old, it is a sandy sliver, devoid of mountains. When it's middle-aged, it can be a lush wonderland, a haven for anything green, like Kaua'i. And when it is young, it is dynamic and unpredictable, like the Big Island of Hawai'i. Of all the Hawaiian Islands, none offers a larger range of climates and landscapes than the Big Island. The first people to discover Hawai'i's treasures must have been humbled at their good fortune.

### THE FIRST SETTLERS

Sometime around the fourth or fifth century AD a large double-hulled voyaging canoe, held together with flexible sennit lashings and propelled by sails made of woven pandanus, slid onto the sand on the Big Island of Hawai'i. These first intrepid adventurers, only a few dozen or so, encountered an island chain of unimaginable beauty.

