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## The Mystery of Easter Island

### New findings rekindle old debates about when the first people arrived and why their civilization collapsed

Outer slope of the Rano Raraku volcano, the quarry of the Moais with many uncompleted statues. ([Easter Island](#))

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Hundreds of years ago, a small group of Polynesians rowed their wooden outrigger canoes across vast stretches of open sea, navigating by the evening stars and the day's ocean swells. When and why these people left their native land remains a mystery. But what is clear is that they made a small, uninhabited island with rolling hills and a lush carpet of palm trees their new home, eventually naming their 63 square miles of paradise Rapa Nui—now popularly known as Easter Island.

On this outpost nearly 2,300 miles west of South America and 1,100 miles from the nearest island, the newcomers chiseled away at volcanic stone, carving moai, monolithic statues built to honor their ancestors. They moved the mammoth blocks of stone—on average 13 feet tall and 14 tons—to different ceremonial structures around the island, a feat that required several days and many men.

Eventually the giant palms that the Rapanui depended on dwindled. Many trees had been cut down to make room for agriculture; others had been burned for fire and used to transport statues across the island. The treeless terrain eroded nutrient-rich soil, and, with little wood to use for daily activities, the people turned to grass. "You have to be pretty desperate to take to burning grass," says John Flenley, who with Paul Bahn co-authored *The Enigmas of Easter Island*. By the time Dutch explorers—the first Europeans to reach the remote island—arrived on Easter day in 1722, the land was nearly barren.

Although these events are generally accepted by scientists, the date of the Polynesians' arrival on the island and why their civilization ultimately collapsed is still being debated. Many experts maintain that the settlers landed around 800 A.D. They believe the culture thrived for hundreds of years, breaking up into settlements and living off the fruitful land. According to this theory, the population grew to several thousand, freeing some of the labor force to work on the moai. But as the trees disappeared and people began to starve, warfare broke out among the tribes.

In his book *Collapse*, Jared Diamond refers to the Rapanui's environmental degradation as "ecocide" and points to the civilization's demise as a model of what can happen if human appetites go unchecked.

But new findings by archaeologist Terry Hunt of the University of Hawai'i may indicate a different version of events. In 2000, Hunt, archaeologist Carl Lipo of California State University, Long Beach, and their students began excavations at Anakena, a white sandy beach on the island's northern shore. The researchers believed Anakena would have been an attractive area for the Rapanui to land, and therefore may be one of the earliest settlement sites. In the top several layers of their excavation pit, the researchers found clear evidence of human presence: charcoal, tools—even bones, some of which

had come from rats. Underneath they found soil that seemed absent of human contact. This point of first human interaction, they figured, would tell them when the first Rapanui had arrived on the island.

Hunt sent the samples from the dig to a lab for radiocarbon dating, expecting to receive a date around 800 A.D., in keeping with what other archaeologists had found. Instead, the samples dated to 1200 A.D. This would mean the Rapanui arrived four centuries later than expected. The deforestation would have happened much faster than originally assumed, and the human impact on the environment was fast and immediate.

Hunt suspected that humans alone could not destroy the forests this quickly. In the sand's layers, he found a potential culprit—a plethora of rat bones. Scientists have long known that when humans colonized the island, so too did the Polynesian rat, having hitched a ride either as stowaways or sources of food. However they got to Easter Island, the rodents found an unlimited food supply in the lush palm trees, believes Hunt, who bases this assertion on an abundance of rat-gnawed palm seeds.