The People That Time Forgot

While excavating a cave on the Indonesian island of Flores, archeologists made an astonishing and unexpected find: a very unusual human skeleton. "At first we thought it was a child," says Mike Morwood, one of the archeologists involved in the project. The remains were

definitely human, but the body was only about one meter (three feet) long—about the size of a modern three-year-old.

The team transported the skeleton back to Jakarta (the capital of Indonesia) for closer inspection. There, Peter Brown, an anthropologist from the University of New England in Australia, analyzed the skeleton. He determined that the human was a female, and contrary to what archeologists 20 first thought, that she was an adult, not a child. Additional studies also showed that she had lived about 18,000 years ago, the same time that modern humans (Homo sapiens) were walking the Earth. Her 25 forehead and jaw were similar to those of an earlier type of human, Homo erectus, but her size was unique—unlike any other human archeologists had ever seen. But it wasn't just her height and weight that made her unusual. She also had a very small brain—about a



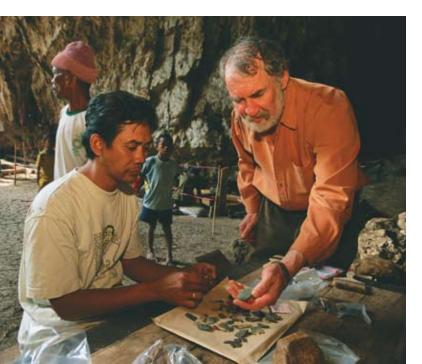
third of a modern human's, even smaller than a chimpanzee's.

Perhaps, scientists suggested, this was a modern human who had suffered from a rare disease which caused her body to develop abnormally. But when archeologists returned to the cave where they had made their original discovery, they unearthed several other adult skeletons. All shared the same characteristics as the first female. Scientists began to realize that an entire population of tiny beings had once lived on Flores. Had they discovered a new species of modern human?

Immediately scientists had a number of questions about these people—which they now called *Homo floresiensis*. One of the first was, where did this species come from? According to Peter Brown, these little people (who lived on Flores from about 95,000 until at least 13,000 years ago) may have evolved from a population of *Homo erectus*, which crossed from Asia to Indonesia at least 1.5 million years ago.

55 But how could those early humans have reached the remote island of Flores? Located between mainland Asia and Australia, Flores was never connected by land bridges to either 60 continent. Even when the sea level was low, traveling to Flores involved sea crossings of up to 24 kilometers (15 miles). People could only have reached Flores if they had the brain power to design and sail boats. Scientists had believed that Homo erectus had a fairly limited intelligence. But with these new findings, they are now asking whether 70 *Homo erectus* was smarter than first thought.

Which raises another question: *Homo erectus* was probably several centimeters taller than Homo floresiensis. What caused the change in size? Scientists believe thousands of years of isolation on Flores could have caused the people to shrink—especially if they had no natural predators,2 which would make physical size and strength less important. In addition, 80 having a larger body requires more food, and on Flores, resources were scarce. Minimizing food consumption and adapting in size were necessary for *Homo floresiensis* to survive—a phenomenon often seen in nature.





▲ A Homo floresiensis hunter protects his catch—a giant rat from a Komodo dragon.

- Despite their smaller brains, the little people were apparently skilled toolmakers and clever hunters. Near the spot where archeologists found the bones of *Homo floresiensis*, they also unearthed pointed stone tools and the remains of a stegodont—an extinct relative of the elephant, which could weigh 400 kilos (800 pounds). The stone tools were probably used to hunt animals that were many times larger than the little people.
- There is no sign of modern humans on Flores before 11,000 years ago. Nevertheless, it is possible that people like us (who were already living in Australia and parts of Asia 40,000 years ago) met their tiny human cousins.
- 100 Some scientists have suggested that a conflict between the two human species may have caused Homo floresiensis to die out. More likely, though, is that the tiny humans became extinct as a result of a major volcanic eruption.
- 105 Today, though, local stories are still told about little people who once walked the island. It's amazing to think that modern humans may still have a memory of sharing the planet with another species of human—one who was like
- 110 us but also very different.
 - ¹ If you **unearth** something, you take it out of the ground.
 - ² A **predator** is an animal that kills and eats other animals.
- Archeologists Wahyu Saptomo and Mike Morwood look for signs of early humans in a cave known as Liang Bua, on the island of Flores.