



## SCIENCE & TECHNOLOGY

# Early Humans in Europe Likely Wiped Out by Cold Weather

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Scientists say that an early human **species** that settled in what is now Europe was **wiped out** by a long ice age over 1 million years ago.

The scientists say *Homo erectus*, considered the first member of the human family tree to have moved out of Africa, was not able to survive a cold period that lasted 4,000 years. They published the research in early August in the journal *Science*.

Chris Stringer is an anthropologist at the Natural History Museum in London. He was one of the study's writers. Stringer and his co-writers say they studied **fossils** and stone tools found in Europe. The fossils showed a gap in the timeline of about 200,000 years.

"There was probably a complete **interruption** in the early human occupation of Europe," Stringer said.

The researchers say early human species likely did not know how to make warm clothing or find ways to make fire in cold places. The cold weather froze the ground and prevented them from gathering food and hunting animals.

The scientists used ancient organic compounds left by **algae** and **pollen** off Portugal's coast to learn about climate change over 1 million years ago. The study showed the average air temperature dropped by 4.5 degrees Celsius.

Axel Timmermann is a climate physicist at Pusan National University in South Korea. He said the study shows that human occupation of Europe was not continuous but was interrupted by at least one "climate-**induced extinction**."

It is not clear how many early humans died off during this cold period, the researchers said. “Probably at best in the tens of thousands in Europe,” Stringer said of the population at the time.

Another study writer was Chronis Tzedakis, a physical geography teacher at University College London. He said humans probably returned to Europe about 900,000 years ago after “**evolutionary** or **behavioral** changes” that permitted them to survive in cold conditions.

Scientists have records of human-like species in Spain and Germany from 800,000 to 600,000 years ago. Homo sapiens are known in Africa from 300,000 years ago and may have briefly come to Europe more than 200,000 years ago. But the main movement of humans into Europe came only 60,000 years ago.

I’m Dan Friedell.

*Dan Friedell adapted this story for Learning English based on a report by Reuters.*

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## Words in This Story

**species** *-n.* a group of animals or plants that are similar and can produce young animals or plants : a group of related animals or plants that is smaller than a genus

**wipe out** *-v.* to eliminate completely

**fossil** *-n.* something (such as a leaf, skeleton, or footprint) that is from a plant or animal which lived in ancient times and that you can see in some rocks

**interruption** *-n.* a situation where something stops for a period of time

**algae** *-n.* simple plants that have no leaves or stems and that grow in or near water

**pollen** *-n.* the very fine usually yellow dust that is produced by a plant and that is carried to other plants of the same kind usually by wind or insects so that the plants can produce seeds

**induce** *-v.* to cause something to happen

**extinction** *-n.* when something stops living or dies out

**evolutionary** *-adj.* having to do with the way something changes over time

**behavioral** *-adj.* having to do with the way someone or something acts

*We want to hear from you. What do you think of this news about humans in Europe?*