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People walked like us 1.5 million years ago, study finds

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Newfound footprints show that early humans walked like us, on anatomically modern feet, 1.5 million years ago, scientists say.

Researchers including anthropologist W.K. Harris of Rutgers, The State University of New Jersey, reported the findings in the in the Feb. 27 issue of the journal *Science*.



A footprint from Ileret, Kenya, dated as 1.5 million years old. (Image courtesy Prof. Matthew Bennett, Bournemouth University, via Science/AAAS)

Harris directs a field school that the university operates in collaboration with the National Museums of Kenya. From 2006 to 2008, the field school group of undergraduate students excavated the site yielding the footprints.

The prints turned up in two 1.5 million-year-old rock layers near lleret in northern Kenya. The rare impressions yielded information about soft tissue form and structure not normally accessible in fossilized bones, according to the research group, and are the oldest evidence of essentially modern human-like foot anatomy.

In the prints, the big toe is parallel to the other toes, unlike that of apes where it is separated in a grasping configuration useful in trees, the investigators said.

The footprints show a pronounced human-like arch and short toes, typically associated with an upright bipedal stance, they added. The size, spacing and depth of the impressions were the basis of estimates of weight, stride and gait, all found to be within the range of modern humans.

The authors attribute the prints to the hominid species *Homo ergaster*, or early *Homo erectus* as it's more generally known. This was the first hominid to have had the same body proportions as our species, modern *Homo sapiens*. Various *H. ergaster* or *H. erectus* remains have been found in Tanzania, Ethiopia, Kenya and South Africa, with dates consistent with the lleret footprints.

Hominids are a family of primate species that includes ours along with extinct, humanlike creatures.

Other hominid fossil footprints dating to 3.6 million years ago had been discovered in 1978 by Mary Leakey at Laetoli, Tanzania. These are attributed to the less advanced *Australopithecus afarensis*, a possible ancestral hominid. The smaller, older Laetoli prints show indications of upright posture but possess a shallower arch and a more ape-like, divergent big toe.

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