

## *Crowded Cave*

# Early humans were not alone

**Mariette le Roux**

**H**umanity's forerunners shared the planet with at least two related species nearly two million years ago, scientists said on Wednesday 8 August, pointing to newly-unearthed pieces in a 40-year-old fossil puzzle.

Findings published in the journal *Nature* touch on the odyssey of our ancestor, the upright-walking early human known as *Homo erectus*.

"Human evolution (is) clearly not the straight line that it once was thought to be," study co-author Fred Spoor said in a teleconference.

Spoor and a team dug up teeth, face and jaw fragments from sediment dated to the Pleistocene period at a location east of Lake Turkana in northern Kenya between 2007 and 2009, culminating an agonising search for clues about a flat-faced, large-brained hominid whose skull had been found nearby in 1972.

Known as KNM-ER 1470, or 1470 for short, the hominid had lived about two million years ago. But that was the only thing that was clear, because palaeontologists fought bitterly over its identity. Until 2007, evidence remained elusive, for the skull lacked a lower jawbone, a vital piece of evidence.

"Then our luck magically changed, and within three years we found three fossils which we believe are attributable to the same species as 1470," said Meave Leakey, who had discovered 1470 with her husband Richard Leakey.

The new fragments of two individuals that resemble 1470 are between 1.78 million and 1.95 million years old and were found within a 10-kilometre radius of the 1470 site.

"One of the big problems with the skull 1470 was that, yes it is remarkably complete with the whole brain case there and a good part of the face, but it doesn't have teeth and it doesn't have a lower jaw with it," said Spoor. "This (new) little skull

had teeth and in fact the teeth are very well preserved."

The new fossils were gently removed from sandstone using a dental drill before being scanned inside and out at a hospital in the Kenyan capital Nairobi.

The scans were used in a virtual reconstruction of the entire lower jaw, which proved a good fit with the upper jaw of 1470.

The result: a hominid that most likely is of an even older lineage of homo called *Homo rudolfensis*. If so, it deals a blow to a rival theory that 1470 was a misshapen *habilis*.

"Statistically speaking, the chances that this is really a separate species have now greatly improved," said Spoor.

The find is "significant, because they answer a key question in our evolutionary past — how diverse was our genus close to the base of the human lineage?" said Leakey.

Other experts said the find showed that the six-million-year-old human family tree had complex roots, but cautioned about how they should be interpreted.

For instance, some authorities contend that *Homo erectus* evolved from *Homo habilis*, while others insist the two were cousin or sister species.

The fossils "help to confirm the existence of a distinctive kind of early human nearly two million years ago," said Chris Stringer of London's Natural History Museum. But whether either of these two lineages was ancestral to *Homo erectus*, let alone to modern humans, remains uncertain. - *Sapa-AFP*

*Mariette le Roux is a writer for Agence France Presse and the article appeared in <http://www.iol.co.za/news> (Independent Online, South Africa).*