

Early hominid rises again

Fossils unearthed in Kenya between 1995 and 1997 come from a recently identified species in the human evolutionary family that lived about 4.1 million years ago, a research team reports. The creature, dubbed *Australopithecus anamensis*, was the earliest known human ancestor capable of walking upright.

A. anamensis was first identified from 21 fossils found at two sites near Lake Turkana (SN: 8/19/95, p. 119). An additional 38 specimens from the same locations now flesh out this ancient hominid's mix of chimplike and humanlike features, according to paleontologist Meave G. Leakey of the National Museums of Kenya in Nairobi and her coworkers.

Age estimates for *A. anamensis* derive from measurements of argon isotopes in crystals removed from volcanic ash that brackets the fossil-bearing sediment. The fossils, which were buried in an upper and a lower soil layer, all date to approximately 4.1 million years ago, Leakey's group reports in the May 7 NATURE. Preliminary age estimates for the material ranged from about 4.2 million to 3.8 million years old.

A. anamensis jaw and teeth remains look more like those of chimps than of modern humans, the scientists contend. A wrist bone attributed to the ancient hominid also suggests a chimplike arrangement of the hand and fingers. Large differences in body size and canine tooth shape between *A. anamensis* males and females appear comparable to those observed in modern gorillas, they add.

However, previously uncovered leg fossils indicate that *A. anamensis* walked upright, a key trait of hominids.

Leakey's group theorizes that the hominid fossil record from nearly 4.5 million to just after 3 million years ago may consist of a single population that began as a separate genus, *Ardipithecus*, which evolved into *A. anamensis* and then *A. afarensis*, the species that includes the partial skeleton of Lucy.

The new fossil finds help to confirm the existence of *A. ana-*

mensis as a separate species that inhabited eastern Africa before the emergence of Lucy's kind, remarks anthropologist Peter Andrews of the Natural History Museum in London.

A planned analysis of *Ardipithecus* fossils, which has been slowed by the difficulty of removing surrounding rock from the specimens, may clarify the evolutionary relationship between *Ardipithecus* and *A. anamensis*, he says. —B.B.

Ball court bounces back in time

Excavation of an earthen mound located near Mexico's southern Pacific coast has yielded a ball court dating to between 3,400 and 3,250 years ago. It is at least 500 years older than similar ball courts found at many sites from ancient civilizations in Mexico and Central America.

Researchers know little about the game or ritual activity that took place on these ball courts. Nonetheless, large-scale courts were in use much earlier than previously thought, according to a report in the April 30 NATURE. Moreover, a standard layout survived with few changes until regional populations were conquered by the Spanish in the 16th century, a research team asserts.

During a probe of a large mound at the site of Paso de la Amada, a group of investigators led by Warren D. Hill and Michael Blake, both of the University of British Columbia in Vancouver, and John E. Clark of Brigham Young University in Provo, Utah, uncovered two parallel platforms flanking a 260-foot-long alley. Later ball courts look much the same, Hill and his coworkers assert.

Other finds at Paso de la Amada suggest that the site consisted of both high- and low-status households. Socially elite groups may have sponsored the construction of ancient ball courts at least in part to enhance their community standing, the scientists propose. —B.B.

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