

A NEW SPECIES OF HOMO?



The discovery of remains of another species of homo that lived alongside modern humans only 18 or even 13 thousand years ago is everywhere today – Guardian Unlimited | Life | “From 18,000 years ago, the one metre-tall human that challenges history of evolution” – a new “hobbit” species found on the Indonesian island of Flores.

[Why didn't I believe it until I read the original report in Nature?](#)

And I am still skeptical.

Too fantastic?

Did I need the sober language and measurements? Lots of graeco-latin biologisms?

Description of *Homo floresiensis* (MS – not the *homo floresensis* of many google searches)

Order Primates Linnaeus, 1758

Suborder Anthropoidea Mivart, 1864

Superfamily Hominoidea Gray, 1825

Family Hominidae Gray, 1825

Tribe Hominini Gray, 1825

Genus *Homo* Linnaeus, 1758

Homo floresiensis sp. nov.

Etymology. Recognizing that this species has only been identified on the island of Flores, and a prolonged period of isolation may have resulted in the evolution of an island endemic form.

Holotype. LB1 partial adult skeleton excavated in September 2003. Recovered skeletal elements include the cranium and mandible, femora, tibiae, fibulae and patellae, partial pelvis, incomplete hands and feet, and fragments of vertebrae, sacrum, ribs, scapulae and clavicles. The repository is the Centre for Archaeology, Jakarta, Indonesia.

Referred material. LB2 isolated left mandibular P3. The repository is the Centre for Archaeology, Jakarta, Indonesia.

Localities. Liang Bua is a limestone cave on Flores, in eastern Indonesia. The cave is located 14 km north of Ruteng, the provincial capital of Manggarai Province, at an altitude of 500 m above sea level and 25 km from the north coast. It occurs at the base of a limestone hill, on the southern edge of the Wae Racang river valley. The type locality is at 08° 31' 50.4" south latitude 120° 26' 36.9" east longitude.

Horizon. The type specimen LB1 was found at a depth of 5.9 m in Sector VII of the excavation at Liang Bua. It is associated with calibrated accelerator mass spectrometry (AMS) dates of approximately 18 kyr and bracketed by luminescence dates of 35 ± 4 kyr and 14 ± 2 kyr. The referred isolated left P3 (LB2) was recovered just below a disconformity at 4.7 m in Sector IV, and bracketed by a U-series date of 37.7 ± 0.2 kyr on flowstone, and 20 cm above an electron-spin resonance (ESR)/U-series date of 74 – 12 + 14 kyr on a *Stegodon* molar.

Diagnosis. Small-bodied bipedal hominin with endocranial volume and stature (body height) similar to, or smaller than, *Australopithecus afarensis*. Lacks masticatory adaptations present in *Australopithecus* and *Paranthropus*, with substantially reduced facial height and prognathism, smaller postcanine teeth, and posteriorly orientated infraorbital region. Cranial base flexed. Prominent maxillary canine jugal form prominent pillars, laterally separated from nasal aperture. Petrous pyramid smooth, tubular and with low relief, styloid process absent, and without vaginal crest. Superior cranial vault bone thicker than *Australopithecus* and similar to *H. erectus* and *H. sapiens*. Supraorbital torus arches over each orbit and does not form a flat bar as in Javan *H. erectus*. Mandibular P3 with relatively large occlusal surface area, with prominent protoconid and broad talonid, and either bifurcated roots or a mesiodistally compressed Tomes root. Mandibular P4 also with Tomes root. First and second molar teeth of similar size. Mandibular coronoid process higher than condyle, and the ramus has a posterior orientation. Mandibular symphysis without chin and with a posterior inclination of the symphyseal axis. Posteriorly inclined alveolar planum with

superior and inferior transverse tori. Ilium with marked lateral flare. Femur neck long relative to head diameter, the shaft circular and without pilaster, and there is a high bicondylar angle. Long axis of tibia curved and the midshaft has an oval cross-section.

Many of the reports claim that the finds prompt a rewrite of human evolution. Well no – it has been clear for some time that there is no single evolutionary line that leads to modern humans and that for most of human history there have been more than one contemporary species of homo and australopithecine precursors.





Homo floresiensis in Nature, photo by Peter Brown

The fascination for me is the remote island setting and story. Homo floresiensis – remnants of homo erectus maybe, dwarfed by an island isolation and the forces of evolutionary selection. Not enough to eat? Wiped out by a volcano?

The island is home to the giant Komodo dragon lizards.

It is Conan Doyle's "Lost World"

Eaten by dragons?