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The *Elephas (Palaeoloxodon) antiquus* skeleton and other large mammals from the Lower Palaeolithic locality Marathousa 1 (Megalopolis Basin, Greece): preliminary results

George Konidaris¹, Athanassios Athanassiou², Vangelis Tourtoukis¹, Nicholas Thompson¹, Domenico Giusti¹, Eleni Panagopoulou², Katerina Harvati¹

1 - Eberhard Karls University of Tübingen, Palaeoanthropology, Senckenberg Centre for Human Evolution and Palaeoenvironment, Tübingen, Germany  
2 - Ministry of Culture, Ephorate of Palaeoanthropology-Speleology, Athens, Greece

The Megalopolis Basin (Peloponnesus, Greece) has long been known for its Middle Pleistocene mammal fossils (see [1] and references therein). In 2013 a palaeolithic/palaeoanthropological survey, conducted by a joint team from the Ephorate of Palaeoanthropology Speleology of the Greek Ministry of Culture and the University of Tübingen, led to the discovery of a new open-air locality, Marathousa-1 (MAR-1), when stratified bones and lithic artefacts were identified in a section of the Marathousa Member, Choremi Formation [2]. The preliminary ESR analysis dates the locality at 0.5-0.4 Ma [3]. The large mammal faunal material collected so far (2013-2016) includes the castorid *Castor fiber*, the mustelids *Lutra simplicidentus* and *Mustela* sp., the felid *Felinis* sp., the canids *Vulpes* sp. and *Canis* sp., the elephantid *Elephas (Palaeoloxodon) antiquus*, the hippopotamid *Hippopotamus antiquus*, the bovid *Bison* sp., and the cervids *Dama* sp. and *Cervus elaphus*. This faunal association is common in the Galerian mammal communities of Europe (ca. 0.9-0.4 Ma). Furthermore, it is consistent with a temperate climate, and is indicative of a landscape with substantial woodland components and more open areas, close to permanent and large freshwater bodies. Of particular interest are an elephant cranium and numerous postcranial elements, which were found in close anatomical association and are attributed to a single individual of the straight-tusked elephant *Elephas (P.) antiquus*. The skeleton belonged to an old male in its sixties, with live skeletal height around 3.7 meters and body mass around 9.0 tones. The good state of preservation of the MAR-1 bones allows the identification of taphonomic modifications. Three-dimensional virtual reconstructions of marks with the use of a confocal microscope enabled the identification of cut marks and their micromorphological characteristics. Cut marks and percussion damage indicate hominin exploitation of the elephant carcass and other mammal bones by means of butchering activities, which is in accordance with the lithic assemblage and its spatial association with the bones. Carnivore gnawing is also evident on some specimens, suggesting a certain degree of carnivore competition with humans for early access to the animal carcasses. Marathousa-1 is among the oldest elephant butchering sites in Europe and the only one known in Southeastern Europe.

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