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Pleistocene insular Proboscidea of the Eastern Mediterranean: an update and revision of available samples

Athanassios Athanassiou¹; George Lyras²; Alexandra A.E. Van der Geer³

¹Ephorate of Palaeoanthropology–Speleology/ Ministry of Culture/ Greece (Ελλάδα), ²Department of Historical Geology and Palaeontology/ National and Kapodistrian University of Athens/ Greece (Ελλάδα), ³/ Naturalis Biodiversity Center/ Netherlands

Content

The Eastern Mediterranean islands, most of which belong to the Aegean archipelago, have a complicated biogeographic history, which puts its stamp on their fauna and flora. A now extinct but most important faunal component are the elephants. The Eastern Mediterranean islands are particularly rich in Pleistocene endemic elephants, either descendants of the European straight-tusked elephant *Palaeoloxodon antiquus* or the Southern mammoth, *Mammuthus meridionalis*. Their presence, history and palaeobiogeography has been documented only for Cyprus, Crete, Kasos, Rhodes, Tilos, Kythera, Naxos, and Delos. For seven other islands only anecdotal references exist in the literature: Kalymnos, Astypalaea, Milos, Seriphos, Kythnos, Paros and Imbros. In this presentation we review the previously published specimens and taxa, describe previously undescribed specimens that were relocated in museum collections and put them into context. Moreover, more recently excavated dental specimens from Astypalaea and Crete are presented here for the first time. Noteworthy is a mandibular part allegedly deriving from Kalymnos, whose provenance is discussed based on biogeographical reasoning. Two molars from Kythera, which were referred to the continental species *Palaeoloxodon antiquus* in the past, are described here as belonging to an endemic species instead. A rather robust partial tusk from Astypalaea is described as an insular form probably of *Palaeoloxodon*, based on the lack of torsion. Lastly, an undescribed molar of *Mammuthus creticus* from Western Crete, is presented as an additional specimen to the species' limited dental sample, contributing to the knowledge of its dental morphology. The insular elephants of the Eastern Mediterranean could be either the result of island hopping or separate colonization events from the mainland. However, the majority of elephant samples come from the land-locked Aegean archipelago which favours a direct colonization from the nearby mainland.

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