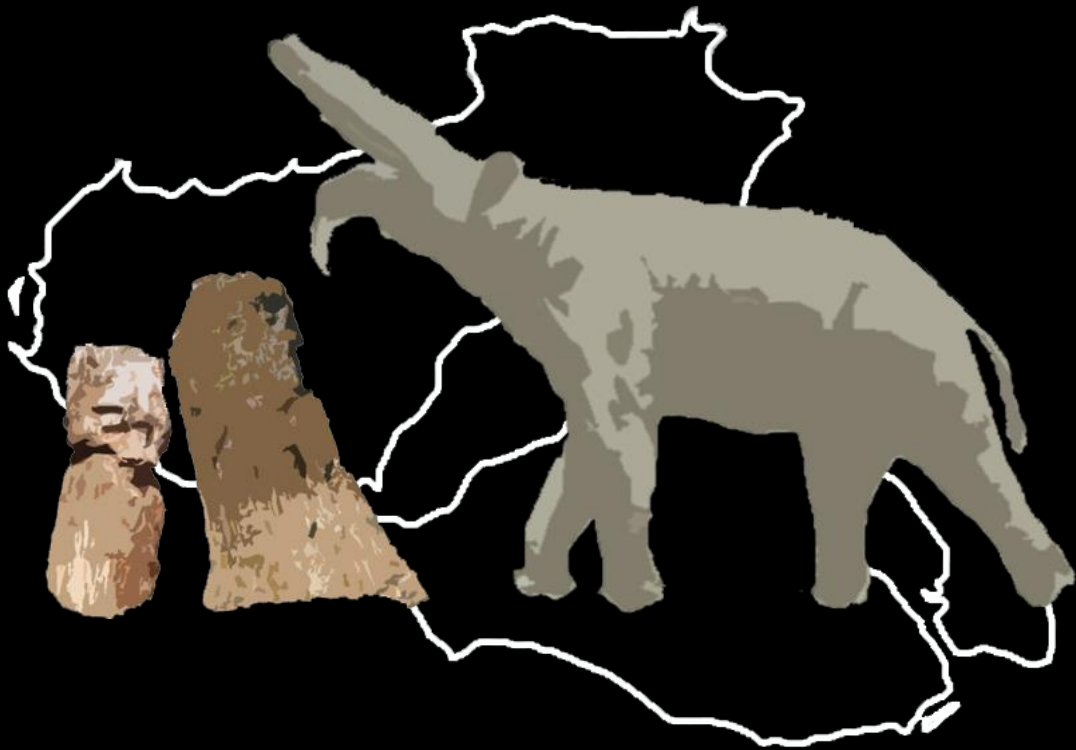


2nd INTERNATIONAL MEETING OF EARLY-STAGE RESEARCHERS IN PALAEOONTOLOGY

Sigri (Lesvos) Greece

May 2017



CONFERENCE PROCEEDINGS



MICROFAUNAL ASSEMBLAGE OF THE GÖLBAŞI-HARMANLI (SE ANATOLIA) COAL SEAM: INTERPRETATIONS ON QUATERNARY GEOGRAPHIC DISTRIBUTION OF SOME EASTERN MEDITERRANEAN TAXA

Alaettin Tuncer^{1*}, Cemal Tunoğlu¹, Burçin Aşkim Gümüş², Ali Ihsan Karayiğit¹, Rıza Görkem Oskay¹

1.Hacettepe University, Department of Geological Engineering, Ankara, Turkey

2.Gazi University, Department of Biology (Zoology), Ankara, Turkey

The Gölbaşı-Harmanlı coal seam is located within the pull-apart Gölbaşı Basin (Adıyaman, SE Anatolia) controlled by the NE-SW trending East Anatolian Fault Zone (EAFZ). This study focuses on micropaleontological analyses of twenty-one samples that were obtained from the Gölbaşı open-pit coal mine (GOCM) section. Six ostracod taxa (*Cypridopsis vidua*, *Herpetocypris* cf. *chevreuxi*, *Humphocypris subterranea*, *Psychrodromus olivaceous*, *Candona* sp. and *Gomphocythere* cf. *geareyi*), seven gastropod taxa (*Theodoxus anatolicus*, *Bithynia phialensis* cf. *syriaca*, *Horatia parvula*, *Bythinella* sp., *Valvata (Cincinna) piscinalis*, *Galba truncatula*, *Gyraulus piscinarum acutissimus*) and as well as one bivalve (*Pisidium personatum*) taxa were identified from the GOCM (this study). Furthermore, charophyte gyrogonites and fish teeth remains were obtained. Considering the ostracod assemblage determined from the GOCM, and the micromammal data from intercalations of the Gölbaşı coal seam (Suata-Alparslan and Dinçarslan, 2011), the Gölbaşı coal seam deposited during the Middle Pleistocene. The identified microfaunal assemblage suggests that different biogeographic realm were hosted in the GOCM during the Middle Pleistocene, such as Cosmopolitan (*C. vidua*), widely distributed (*H. chevreuxi*), Holarctic (*G. truncatula*), Palearctic (*P. olivaceous*, *V. piscinalis* and *P. personatum*), Eastern Mediterranean (*H. subterranea*, *G. geareyi* and *B. phialensis syriaca*) and endemic (*G. piscinarum acutissimus*, *H. parvula* and *T. anatolicus*) species. Nevertheless, several of these taxa were commonly reported from Neogene and Quaternary basins in Turkey, the most significant are *G. cf. geareyi*, *H. subterranea* and *B. phialensis* cf. *syriaca* in the GOCM where their northernmost limits were identified. The presences



2nd International Meeting of Early-Stage Researchers in Palaeontology

of these taxa also suggest the possible transportation of them from the other Eastern Mediterranean areas (e.g. Orontes (Syria) and Jordan Valley (Israel)) during the Quaternary.

References

1: Suata-Alparslan, F. and Diñarslan, İ., 2011. The Middle Pleistocene fauna from Southeastern Anatolia (Gölbaşı-Adıyaman, Turkey). Proc. 11th Int. Multidisciplinary Scientific Geo Conf. (SGEM2001), 277-282.



2nd International Meeting of Early-Stage Researchers in Palaeontology