

composition of the middle Miocene hominoid bearing assemblages indicates closed environment with warm/humid conditions, while during late Miocene the environment was relatively open/dry. The analysis and comparison of the hominoid bearing mammal assemblages with other Eurasian middle and late Miocene ones, as well as with modern faunas from known environments indicate that all the European middle Miocene faunas and the Vallesian ones of Western Europe can be correlated to the modern closed assemblages (tropical/subtropical forests, seasonal forests) indicating similar palaeoenvironment. On the other hand, all the late Miocene with or without hominoids assemblages of Eastern Mediterranean (except Udabno I) are correlated with the modern open assemblages suggesting relatively open landscape with warm and dry conditions (wooded savannah, savannah with shrubs, savannah with grass). The habitat of *Griphopithecus alpani* and *Kenyapithecus kizili* was similar to that of a monsoon forest with meadows. The hominoids *Ankarapithecus metei*, *Ouranopithecus macedoniensis*, *Ouranopithecus turkae* and the Chirpan hominoid were living in open landscape (savannah with trees, bushes, shrubs and grass) under warm/dry conditions. The palaeoenvironment of *Udabnopithecus garedziensis* seems to be more closed and humid than the other late Vallesian ones and closer to that of the middle Miocene assemblages.

Late Miocene Carnivores from the Greco-Iranian Province: comparisons, guild structure, palaeoecology

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The Greco-Iranian Province (Balkans, Turkey, Iran and Afghanistan) includes numerous mammal localities, which provided a significant number of carnivores. Although there are several taxonomic studies concerning them, their guild structure and relationships were never studied in details. The present study is a preliminary effort to give some data about their relationships, guild structure and their palaeoecology

The carnivores of the studied area are separated in groups, including the taxa of each MN zone of the Greco-Iranian Province. The faunal similarity of the defined groups is analyzed, indicating that Vallesian (MN-9 and MN-10) assemblages are well separated from the Turolian (MN-11 and MN-12) ones. Their faunal similarity is low, suggesting different taxa. The MN-13 assemblage is separated from the others due to its limited faunal data.

The guild structure (comparing body mass, locomotor pattern and diet class) of each MN assemblage is also studied and the diagrams indicate differences between the Vallesian and Turolian carnivoran assemblages. The absence of arboreal forms in all assemblages, as well as the relative abundance of the hyaenids and the cursorial forms suggest a possible open environment. The multivariate analysis of the studied carnivoran assemblages in comparison with the recent ones from known environments confirms their open character. These palaeoecological results fit quite well with the known palaeoenvironmental conditions of the Greco-Iranian Province.

Preliminary results of the palynological investigation of the Toarcian deposits of Ionian Zone (Western Greece)

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In this study we present preliminary palynological data from Lower Toarcian deposits of the Ionian Zone (Western Greece). The Ionian Zone belongs to the external Hellenides and during the Mesozoic constituted part of the southern Tethyan margin. The initially shallow