Geophysical Research Abstracts,
Vol. 10, EGU2008-A-07018, 2008
SRef-ID: 1607-7962/gra/EGU2008-A-07018
EGU General Assembly 2008


# Paleogeography of Late Oligocene to Miocene rodent assemblages from the western Dinaride-Anatolian Land

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The northward movement of the African plate during the Oligocene induced uplift and subsequent erosion of the Dinaride landmass and infill of the SW part of the Paratethys basin, bounded by the Mediterranean Tethys in the southwest and the Paratethys sea in the northeast. The new land was soon occupied by an extensive lacustrine system which lasted in its western part into the Middle Miocene. Integrated stratigraphical investigations of that Miocene Dinaride lake system initiated investigations of rodent faunas for improving the correlation and providing insight in the paleogeographic processes. Despite the extensive record of Early Miocene Rodentia from South-western Europe and the eastern Mediterranean area the exchange of faunal elements between these areas is poorly documented.

Investigation of the coal bearing deposits in Bosnia and Herzegovina preserved near Ugljevik and Banovići yielded new small assemblages which could be biostratigraphically dated. The assemblage from Ugljevik resembles the Late Oligocene ones from Thrace and Anatolia (Ünay, 1989; Ünay *et al.*, 2003) in sharing the same species of *Eomys* (Thrace), a ctenodactyloid (Anatolia) and a *Bransatoglis* that is similar to those from both areas. At the same time the dominant cricitid in Ugljevik seems to be ancestral to *Enginia*, which is so far known from coal bearing deposits in Anato-

lia only. The assemblage of Banovići, containing *Eumyarion* cf. *microps* and a new primitive *Deperetomys*, resembles in this respect the Early Miocene fauna of Anatolia. The absence of the cricitid genera *Democricetodon* and *Megacricetodon* in this locality suggests that it is older than the Early Miocene localities of Sibnica (MN4-5, Serbia; Marković, 2003), Aliveri (MN4, Greece; Klein Hofmeijer & de Bruijn, 1988) and Antonios (MN4-5, Greece; Vasileiadou & Koufos, 2005). These three localities show a clear affinity to eastern Mediterranean rodent assemblages and contain species which are only known from younger Western and Central European deposits, such as *Megacricetodon primitivus* from Aliveri, *Eumyarion weinfurtheri* and *Bransatoglis astaracensis* from Sibnica and *Cricetodon meini* from Antonios.

First the late Middle Miocene rodent fauna of Vračevići (MN7-8, Serbia; Marković 2003) represents an assemblage thoroughly comparable to Central European faunas. Consequently the trend we observed in the rodent faunas from the deposits in the Dinarids is that the faunas older than MN4 resemble eastern Mediterranean assemblages and the younger ones become increasingly Central European in composition.

The study is a contribution to the Austrian FWF Project P18519-B17: "Mollusc Evolution of the Neogene Dinaride Lake System".

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