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Fish Otoliths from the Zanclean of Southwestern Peloponnesus (Greece)

Poster Presentation
European Fossil Fish Symposium

The Zanclean teleost fish assemblage of Agia Triada (southwestern Peloponnesus, eastern Ionian) includes mostly Myctophidae, Clupeidae, Sparidae, Gobiidae, Congridae, and Gadidae. In this study, we compare the Agia Triada assemblages with the Zanclean assemblages of the south Aegean Sea (Voutes section, Heraklion, Crete) and the Messinian assemblages of Zakynthos Island also in the eastern Ionian (Kalamaki section) to remark on the implications of the Messinian Salinity Crisis on the eastern Mediterranean fish fauna. Both Zanclean outcrops, in Peloponnesus and on Crete, reveal very rich and diversified assemblages developed during the Zanclean. On the other hand, the pre-evaporitic assemblage of Zakynthos Island contains fewer species. In addition, the fish inhabiting the Ionian Sea just before the Messinian Salinity Crisis mostly were under significant environmental stress, which appears to have suppressed their growth rate, as indicated by the fact that all otolith specimens from Kalamaki were significantly smaller than their equivalent from the Zanclean sections.

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A Piece in the Puzzle of Miocene Palaeobiogeography

Poster Presentation

A fauna of early Middle Miocene age was discovered at the coal mine of Gračanica (Bugojno, Bosnia-Herzegovina).

The ruminants from this locality comprise at least five different taxa: *Dorcatherium vindebonense*, Palaeomerycidae gen. et sp. indet., *Giraffokeryx* sp., *?Tethytragus* sp., *Eotragus ?clavatus*. The assemblage and its evolutionary stage are well in accordance with a fauna of the Mediterranean Neogene Mammal Zones 5/6. Though the remains are sparse, Gračanica essentially contributes to a better understanding of Eurasian migration patterns during the early Middle Miocene. Similar to the Serbian locality Prebreza, Gračanica shows Asian (*Giraffokeryx* sp.) as well as European (*Eotragus ?clavatus*) affinities. Some elements were recorded in European localities as well as in Turkey and Asia (*Dorcatherium*, palaeomerycid, *Tethytragus*). The affinity of the Gračanica fauna to Turkish localities in combination with the record of European faunal elements further confirms the connection of the Balkan Peninsula with Asia Minor providing a corridor between Asia and Europe during this time slice. As the ruminant assemblage from Gračanica comprises only sparse remains, conclusions on the palaeoenvironment are limited. In any case, the ruminant fauna recorded so far from Gračanica fits well with a predominantly forested environment.

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Who killed *Micromeryx*?

Poster Presentation

The rich Middle Miocene locality Sansan (housing nearly 160 vertebrate taxa) is a key locality for the understanding of Miocene ecosystems in Europe. Although much work has been done on the faunal composition of the locality, little is known so far about the taphonomy. New investigations on one of the most abundant large mammal species, the small moschid *Micromeryx flourensianus* Lartet, 1851, give first insights into the taphonomical conditions. While studying the postcranial remains of the species we observed bite marks with a diameter of 2 to 5 mm on the lateral surface of about 50 % of the studied calcanei. In the more abundant astragali we found that more than 50 % of all fragmented specimen were more heavily fragmented on the medial side than on the lateral side and at least 25 % of all fragmented astragali showed bite marks on the medial side similar to the ones observed on the calcanei. From the size of the bite marks, their position, and the body mass of *Micromeryx flourensianus* we conclude that the bite marks are less likely resulting from an attack of a large predator or originate from scavenging on the carcass. Although recorded from the lo-