

## Late Miocene large mammals from Yulafli, Thrace region, Turkey, and their biogeographic implications

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Collecting over the last twenty years in sand and gravel quarries near Yulafli in European Turkey has yielded a substantial fauna of large mammals. The most significant of these for biochronology are well-preserved remains of the ursid *Indarctos arctoides*, the suid *Hippopotamodon antiquus*, and several rhino genera. They point to a late Vallesian (MN 10-equivalent) age. Several other taxa, of longer chronological range, are in good agreement with this dating. The Proboscidea include, besides the Eastern Mediterranean *Choerolophodon*, the *Deinotherium* + *Tetralophodon* association, commonly found in Europe, and the rare '*Mastodon*' *grandincisivus*, here reported for the first time in the Vallesian. The age of Yulafli shows that the large size of some taxa, such as *Deinotherium* (size close to that of *D. gigantissimum*) and *Dorcatherium*, does not always track chronology. The Yulafli fauna is close in composition and ecology to other localities in Turkish Thrace, and also shares several taxa unknown in Anatolia, especially *Dorcatherium*, with the North-Western European Province. It reflects a forested/humid landscape that extended in Vallesian times along the Aegean coast of Turkey, perhaps as far South as Crete, quite distinct from the open environments recorded at the same period in Greek Macedonia and Anatolia, and probably more like the central European one. Together with the establishment of a Tethys-Paratethys marine connection, this 'Eastern Aegean Province' likely acted as an ecological barrier that hindered East-West migrations of open-country large mammals, such as bovids or long-limbed giraffes, and might have contributed to the differentiation of *Ouranopithecus* and *Ankarapithecus*.

**Key words:** Miocene, Vallesian, Proboscidea, Artiodactyla, Perissodactyla, Yulafli, Turkey.

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