

CONTRIBUTIONS TO THE FORMATION OF THE "BUDA MARLS"
(PALEOGENE)

by

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Abstract

The Buda Marls represent a series passing from the Eocene to the Oligocene, according to recent studies by SZTRÁKOS, K. The authors studied this series at one spot of Óbuda (NW part of Budapest).

The Buda Marls contain interbedded limestones of various type.

1. Nummulitic limestone with nodules of calcareous algae;
2. Limestone with branching calcareous algae, bryozoans and benthic foraminifers;
3. Limestone with bryozoans and benthic foraminifers.

The two main types of the marls themselves are:

1. Marl with bryozoans and benthic foraminifers,
2. Marl characterized by the predominance of planktonic foraminifers.

The marls and the limestones of type 3 are indicative of a basin facies, probably - at least temporarily - with a depth of several hundred metres.

Limestone type 1 represents a littoral facies of agitated water, as demonstrated by reworked fragments of Triassic limestones. Limestone type 2 consists mostly of fossils indicating a shallow-water, but less agitated environment.

These near-shore, shallow-water sediments do not alternate conformably with the basin facies rich in planktonic foraminifers. On the contrary, phenomena of plastic flow and sediment mixing could be observed. We have to deal with thin interbeddings without transitional facies.

Accordingly, it can be assumed that sediments slid or slumped down from the steep shore to the margin of the deeper part of the basin, where the Buda Marls were being formed.

It is proved that the lithological types enumerated above which hitherto have been mentioned as individual horizons of the Budapest Upper Eocene are but partly contemporaneous facies.