

# The Taubachian from Diósgyőr-Tapolca cave (Hungary)

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## Topography

Magdolna Hellebrandt, archaeologist of Herman Ottó Museum of Miskolc, conducted the excavation at the entrance of the cave in 1973. The Middle Paleolithic assemblage found in the bottom layer was compared to the lithic industry of Weimar-Taubach first by Lajos Tóth. Árpád Ringer, after his excavation in 1988, made the modern chronostratigraphical study of the site together with László Kordos and Endre Krolopp. Ringer also classified the oldest Middle Paleolithic assemblage of the age of Eem as Taubachian.

In present paper the authors present the litho-, bio- and archaeo-stratigraphy of the site and the technological approached characterization of the Taubachien type assemblage.

Diósgyőr-Tapolca cave is situated in the Eastern side of Bükk Mountains at 179 m asl, in the valley of Szinva stream, in the territory of the city of Miskolc. Several well known Paleolithic cave sites can be found in its neighborhood, such as Szeleta, Büdöspeszt, and Lambrecht Kálmán caves (Fig 1.).

The 70 m long complex cavity system formed in Trias limestone was originally spring cave. The spring activity was especially strong during the Eem interglacial. At the end of the optimum of the interglacial, on the border of Emiliani sub stages 5c and 5d the Szinva was cut intensively into the valley basin's gravel. By the sinking of erosion-base, the cave became inactive and the ruin of the cave wall by chilblain and dissolution and the growing of the cavity in size began.

The cavity filled up to the ceiling between the oxygen-isotope sub stage 5d and Holocene Atlantic period. In the cave deposit, the cave-loess layers of cold periods that contain lime stone fragments alternate with the cave-soils of warm periods.

In the front of the cave mouth facing N-NW, on the Szinva stream's gravel terrace, simultaneously with the filling up of the cavity, subaeric sediments stratified by paleo-soils were deposited. On top of stratigraphy Holocene brown forest soil was formed, which is covered by anthropogenic stony deposit formed not long ago.

In the front of the cave, 150 m away from the entrance in the direction of W-NW, the spring of Szent-György arises. Its water is taken by the Waterworks of Miskolc.

Sometime the spring was the source of the shallow Szent-György stream, whose hot water deposited calcareous sand and travertine onto the edge of valley basin. Such calcareous sand and travertine deposit were found in the stratigraphy of the excavation in 1988, from the trench set 18 m away from the entrance, in the depth of 2,0–2,4 m (Fig 2). Paleo-ecologically well identifiable mollusk and micro mammal fauna were found which are rich in deposits connecting to paleosoils compared to Arcy-Stillfried B interstadial.