History of research

The excavation of Diósgyőr-Tapolca cave began at the end of 19th century. In the karstcavity redone as cellar, János Szendrei the famous historian of Miskolc conducted first excavation in 1882. He described the prehistoric pottery found in deposit, but did not recognized the Paleolithic artifacts and remains of Pleistocene animals.¹

After him, the excavation of the cave continued between 1932 and 1934 by Andor Saád and István Gaál. Paleolithic artifacts and occupational horizons connected to hearths in different sizes were unearthed in layers 5, 4, and 3 of the cave.²

The city of Miskolc decided to establish a sauna in the territory of Diósgyőr-Tapolca lido in 1973. The pool of the sauna was planed to be built in the cave. Preparing the work for construction, Magdolna Hellebrandt, archaeologist of the Herman Ottó Museum of Miskolc conducted the rescue excavation with the participation of Andor Saád at the entrance of the cave (Fig 2).

Hellebrandt set up two trenches parallel to each other, in which four (trench I) and five (trench II) layers were found. Amongst the trenches, the former's layers 3 and 4 and the latter's layers 3–5 yielded archaeological remains of prehistoric man.

Árpád Ringer excavated a trench in the area of $3,0 \times 2,0$ m down to the depth of 4,5 m in 1988, 18 m away from the entrance. The aim of the excavation was the modern stratigraphical interpretation of the subaeric deposits and their correlation to those of the entrance and the cave. But according to the expectation, the lowest Taubachian cultural layer of the cave and the entrance was found between -4,1 and -4,3 meters.

The excavation in 1988 and the interpretation of complex stratigraphic section also connected to the establishment of the Upper Pleistocene chrono-stratigraphy of Northeastern Hungary, and significantly moved forward the setting up of method for comparison of Hungarian caves and subaeric deposits.

Litho- and biostratigraphy

Saád A. és Gaál S. distinguished three Pleistocene layers in the Diósgyőr-Tapolca cave in the 1930's.

According to their time's practice, the layers were differentiated on the basis of their color and sedimentological features—loess and clay content and the characters of lime stone fragments (Fig. 3. A. Layers 2-3-4). A series of sedimentological samples collected by Saád could be re-evaluated in the 1990's and correlated to the stratigraphy of the excavations carried out in 1973 and 1988 (Fig 3. A, B, C).

M. Hellebrandt carried out the excavation at the entrance of the cave in 1973 (Fig 2.).

Five layers were described from trench II. Amongst them layers 3-4-5 are Pleistocene and in accordance with layers 2-3-4 of Saád-Gaál and layers 5-12 of the

¹ Szendrei 1883.

² Gaál – Saád 1935.