

FOREWORD

From the second half of the 1950's on I dealt for more than twenty years—along with a lot of works of different orientation—with the geological study of the Sümeg area (Southern Transdanubia, Hungary). The first and immediate aim of that work had been to study the Lower Cretaceous formations the results of which were published in the monograph entitled "The Lower Cretaceous (Berriasian-Aptian) formations of the Bakony Mountains" (Geol. Hung. ser. Geol. 1964). The most remarkable result that arose from the investigations was the recognition of distinct paleogeographic connections with the Southern Alps and even with Southern Europe. Among the first who assisted me in the work were G. HÁMOR, R. HETÉNYI and E. LÉDECZI, students preparing their theses at that time.

In 1958–59, in connection with diggings for a detailed micropaleontological study of the Upper Jurassic-Lower Cretaceous key section of Mogyorós-domb, prehistoric flint mines were discovered. It was the irregular appearance of the Berriasian microfauna that had made it necessary to re-excavate the section and to dig ever deeper in order to get the "disturbed" parts of the section exposed. It was in the course of this work that excavation workman L. KOCSIS discovered the first implements made of antlers. In the following year I supported L. VÉRTES' first archeological examination of the new site by providing him with excavation facilities. The geologist who assisted me that time was J. KNAUER.

To bring the new surficial key sections and geological key drillings (Sp-1–3, Süt-1–29, S(G)-1–6, S-7, Cn-850, Crt-12, Ng-1) to completion and to carry out their multidisciplinary geological investigation by M. BÁLDI-BEKE, L. GIDAI, F. GÓCZÁN, A. HORVÁTH, M. JUHÁSZ, M. KRETZOI, M. KURUCZ-SIDÓ, L. MÓRA-CZABALAY and G. VÍGH took a rather long time.

Playing a decisive role in the practical implementation of the original goals, my closest associates J. HAAS and E. EDELÉNYI joined in the geological study of the Sümeg area in 1971 still preparing their M. Sc. theses. In the last decade they carried out the geological mapping of the area on a 1:10 000 scale, considerably widening the circle of research and gaining contributions by additional specialists, GY. LELKES, M. KAISER, J. ORAVECZ and A. ORAVECZ-SCHEFFER, who did their best to amplify the scope of the project.

Given the unique tectonic setting, the geological features suitable for serving as a stratotype and the presence of a wealth of artifacts of prehistoric flint mining, I proposed the site, in 1973, to be protected by nature conservancy legislation. Motivated by the need for conserving and retaining the site for the purposes of scientific research, pre- and post-graduate training and public education, the proposal was accepted by the president of the National Conservancy Office and the Mogyorós-domb site was declared a nature conservation area, by virtue of the 4/1976. (III. 24.) OTVH decree. In 1980, a considerable part of the site was expropriated by OKTH (=National Environmental Control and Nature Conservancy Office) and it was leased for administration to the Hungarian Geological Institute. At the expropriated site an open-air museum for exhibition of prehistoric flint mining artifacts has been erected.

The plan to establish a Training Base for Geological Fieldwork was conceived in my mind during my visit to the Lomonosov University's summer training center in conjunction with a geological study tour of the Crimea in 1973. The adversity of circumstances under which the geology students had to have their field training, the lack of permanent training grounds and the particular importance of modern facilities for their acquisition of the fundamentals of a geologist's field activities, were causes that urged for an issue. The best opportunity for solving this problem was offered by the Sümeg area with its wealth of exposures and its diversified geological features. The first joint field training in geology for the geology and geophysics students of the Budapest (Eötvös Loránd University, Faculty of Natural Sciences) and the Miskolc (Heavy Industry Technology) universities was organized in the summer of 1978. During the training course, mixed groups of students (geologist-geophysicist, Budapest–Miskolc) have to carry out a complex geological model case study of a selected

subarea from project planning up to completion of the final report including an economic geological assessment of the subject. In their work the students can rely, in addition to field traverses, on the interpretation of aerial photographs, geophysical measurements, trenching and drilling as well as laboratory analyses and tests.

The Sümeg area offers a key to geological understanding with excellent outcrops, stratotypes and fossil-rich stratigraphic units. It is an ideal study area for pre- and postgraduate training of geologists. Marked progress in scientific research and experience of mineral exploration have made it possible to synthesize the geological knowledge of the area—a synthesis to be implemented according to uniform principles and adapted to the didactic requirements of pre- and postgraduate training.

We are publishing this work primarily with the intention to help the training work at the Sümeg base. Hoping that the detailed geological analysis of this small, but geologically rich area may prove a handy tool for the purpose, we are confident that the evidence here expounded may contribute to the solution of geological problems in the wider neighbourhood as well.

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