Applicant UNESCO Global Geopark

Bükk Region, Hungary

Geographical and geological summary
1. Physical and human geography

Cultural character related to geology:

The Bükk region is rich in historical and architectural monuments. The Bükk Mountains is the cradle of the Hungarian prehistoric people and much research has been conducted on their relics, amongst others in the cave systems. Several objects of paleolithic or neolithic cultures have been preserved at these sites. In the southern piedmont, there are lots of beehive rocks, whose origins are still not well understood.

2. Geological features and geology of international significance

Geological character:

The main geological features in the Geopark are the fold-and-thrust structures, which were mainly formed during the Cretaceous tectogenesis. The “Bálvány key section” is one of the most special on international scale: it is an outcrop on the northern side of the Bálvány exposing the Permian – Triassic boundary - significant extinction event.

The dominant rock types are Triassic limestones, but there are many interesting smaller geologic formations, such as Jurassic pillow lavas found in the South Bükk. The hilly areas around Bükk are mostly volcanioclastics related to large explosive Miocene events.

Geomorphological character:

The Bükk Mountains are rich in karst phenomena. Surface karst features are mostly formed on Triassic white and gray limestones. There are 46 caves with archeological value.

Hydrogeological character:

There is a connected large hydrodynamic karst aquifer within the carbonate rocks of the Bükk region. Travertine often precipitated out of the water of karst springs, forming cones and steps. The Anna Travertine Cave formed in travertine is of international significance.