

SANDBERG – PAJŠTÚN GEOPARK (SAPAG) – A GATEWAY INTO THE MALÉ KARPATY MOUNTAINS GEOLOGICAL HISTORY



Sandbersko – pajštúnsky geopark (SAPAG) – brána do geologickej histórie Malých Karpát

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(map sheets of Slovak Republic 44-214, 44-221, 44-222, 44-223, 44-232, 44-241)

Key words: Geopark, geotourism, geological heritage, Western Carpathians, Slovakia, Malé Karpaty Mts.

Abstract

Sandbersko – pajštúnsky geopark je štvrtým realizovaným geoparkom na území Slovenska, prvým na západnom Slovensku – v južnej časti Malých Karpát. Nachádza sa v geologicky mimoriadne atraktívnom masíve Devínskej Kobyly a v Borinskom kráse v okolí známej zrúcaniny hradu Pajštún a krasovej doliny Prepadlé. Cieľom geologického projektu je predstaviť návštevníkom geoparku atraktívne geologické a kultúrno-historické dedičstvo regiónu. Sú to geologické, paleontologické lokality, geomorfologické a krasové fenomény, dôležité historické objekty, technické a banícke relikty z čias ťažby čiernych bridlíc v Marianke a prieskumných prác mangánového zrudnenia v Malých Karpatoch. Jedným z hlavných výstupov projektu je 10 informačných panelov v slovenskom a anglickom jazyku na turisticky atraktívnych lokalitách: 1. úvodný infopanel s geologickou mapou územia geoparku, 2. Abrázna jaskyňa, bralo Slovinec (obr. 2), 3. bývalá pieskovňa Sandberg, 4. Waitov lom pri Devínskej Novej Vsi, 5. Devínsky hradný vrch v Devíne, 6. kvartérna geológia riek Morava a Dunaj, 7. Bridlicová štôľňa v Marianskom údolí v Marianke, 8. Pajštúnsky hradný vrch nad obcou Borinka, 9. stopy ťažby mangánových bridlíc pri Borinke a 10. Limbašská vyvieracia v Borinskom kráse pri obci Limbach (obr. 1). Ďalšie geologické a paleontologické lokality budú predstavené v knižnej publikácii – Sprievodcovi geoparkom, na zjednodušenej geologickej mape územia geoparku a webových stránkach geoparku.

The geological project was approved by the Ministry of Environment of the Slovak Republic in June 2011, its completion is planned by 31st December 2013.

The project is focused on the realization of the first Geopark in the western part of Slovakia. The Geopark territory encompasses the southernmost parts of the Malé Karpaty Mts. – Devínska Kobyly Mt. (Sandberg and vicinity) and Marianka, Borinka, Stupava, Prepadlé, Lozorno areas (Pajštún and its vicinity).

According to the definition of UNESCO “a geopark is an area containing a number of protected geosites, which are part of an integrated concept of protection, education and sustainable development”.

The aim of geological project is to evaluate the Geopark with regard to the dissemination of important natural phenomena (geological and paleontological geosites, morphological peculiarities, karst phenomena, protection of abiotic components of the environment), but also to important historical objects (Devín

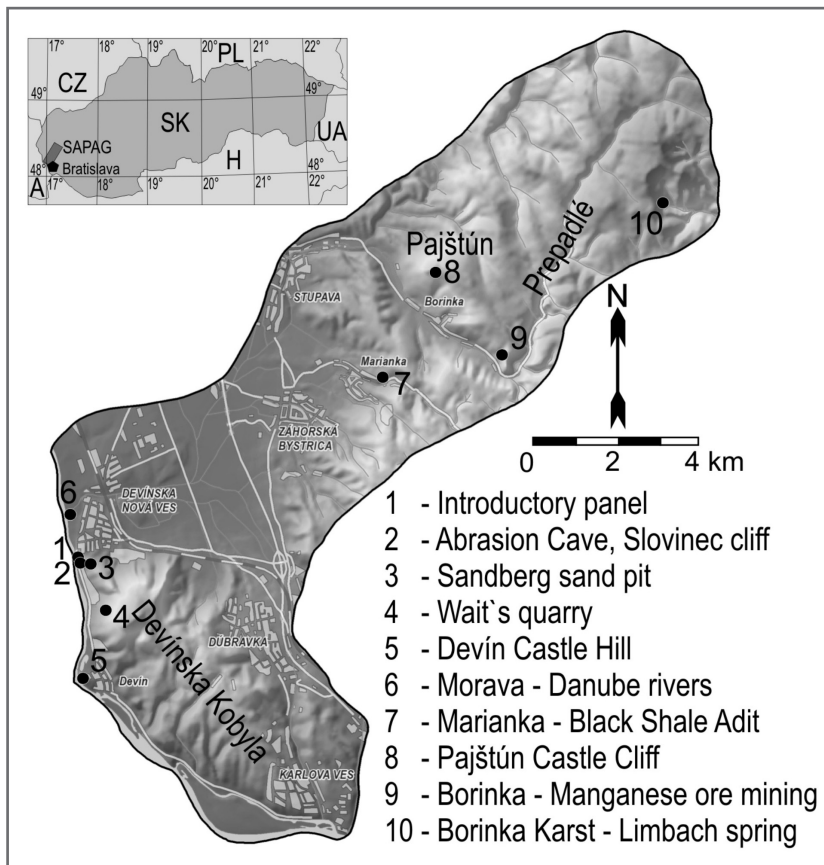


Fig. 1: Schematic map of the Sandberg – Pajštún Geopark area with realized infopanel. Graphic: G. Bystrická, J. Madarás.

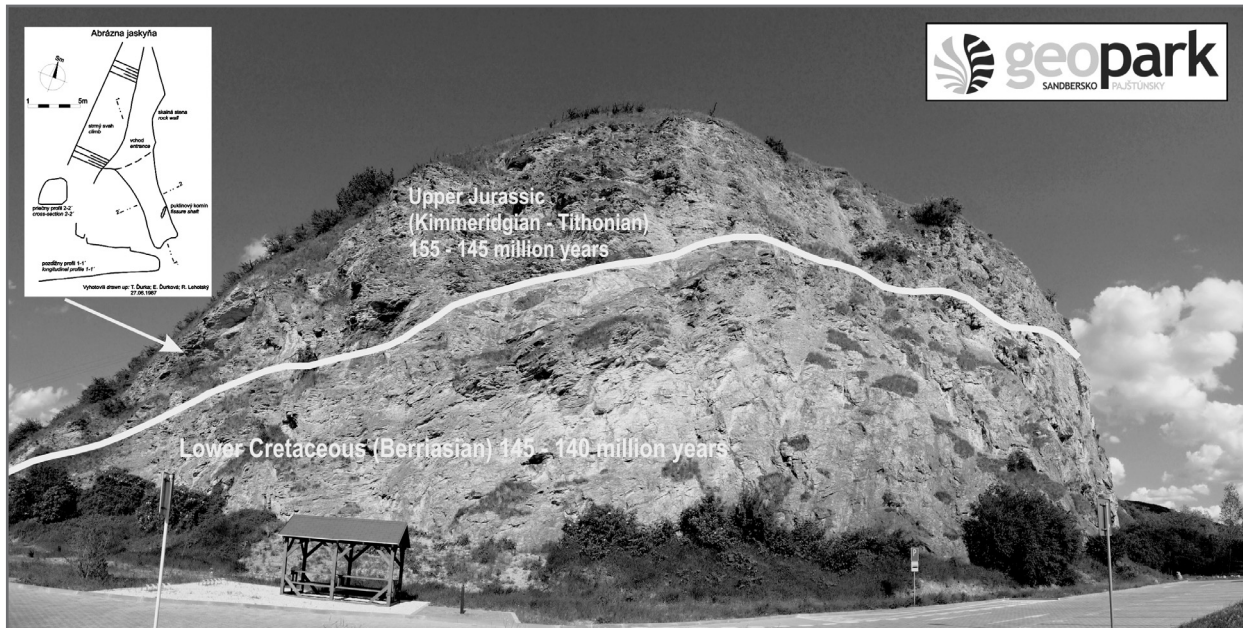


Fig. 2: Slovinec Cliff on the left Morava riverside at the southern border of Devínska Nová Ves: Upper Jurassic – Lower Cretaceous carbonatic rock sequence in overturned stratigraphic position. Groundplan of the Abrasion Cave in the Slovinec cliff – an example of the Late Tertiary sea activity.

Photo and geological interpretation: J. Madarás; Groundplan of the Abrasion Cave: T. Ďurka, E. Ďurková, R. Lehotský, 1987; Geopark logo design: A. Ferda.

Castle, Pajštún Castle, the Medieval pilgrimage site in Marianka), engineering and mining relics from the past time mining activities (Bridlicová štôlna – Black Shale Adit in Marianka, relics of manganese ore mining in the Malé Karpaty Mts.).

One of the main outputs of the project are 10 information panels in Slovak and English languages installed at the major geological tourist sites in the Geopark (Fig. 1). The next outputs will be a Sandberg – Pajštún Geopark Guidebook with a simplified geological map of the Geopark area, interactive CD and Geopark website.

Infopanel are focused on the most interesting places in Geopark with respect to the rich geological history of the area (Fig. 1): 1. *Introductory panel* with geological map of the Geopark area, 2. *Slovinec Cliff* (south of Devínska Nová Ves – Fig. 2), with Upper Jurassic – Lower Cretaceous carbonatic rock sequence in overturned stratigraphic position; *Abrasion Cave* in the Slovinec Cliff – an example of the Late Tertiary sea activity; 3. *Sandberg sand pit* – the Late Tertiary Sea coast on the slopes of Devínska Kobyla Mt.; 4. *Wait's quarry* and historical quarries between Devín

and Dúbravka urban parts – the Middle Miocene shallow-water marine environments; 5. *Devín Castle Hill* – the historical and geological jewel at the Morava – Danube rivers confluence, with a rock sequence covering the period from Early Paleozoic to Neogene; 6. *Morava and Danube rivers* – Quaternary sediments and morphological phenomena (meanders, ox-bow lakes, river terraces formation); 7. *Marianka Black Shale Adit* – medieval mining activities in the Lower–Middle Jurassic black shales; 8. *Pajštún Castle Cliff* – a huge Middle Triassic carbonate block (megaolistolith) in Jurassic rock sequence; 9. *Manganese ore mining* in the Lower – Middle Jurassic carbonates and black shales between Borinka and Lozorno villages; 10. *Borinka Karst – Limbach spring* – the Jurassic limestone karst aquifer in the Prepadlé karst valley with numerous caves, sinkholes, swallow holes, sinking streams and springs.

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