



Geodiversity and geoheritage within urban areas: perception, function, potential

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Geodiversity and geoheritage within urban areas have numerous functions that can be analysed and assessed in the context of ecosystem services (Gordon, Barron 2012, Gray 2018): abiotic resources contribute to the urban and industrial development, landforms are crucial for the situation of main buildings and communications, geomorphological processes limit or support the urban sprawl. Geodiversity and geoheritage within cities are closely linked to cultural heritage and offer numerous cultural services (spiritual, religious, artistic), particular geo(morpho)sites represent a resource for recreation, tourism and education.

These functions, services and benefits have been already recognized and discussed (Reynard et al. 2017, Thornbush, Allen eds. 2018, Habibi et al. 2018) and in some cases, they are supported by conceptual documents (London Geodiversity Partnership 2014).

In the Czech Republic, the geodiversity is appreciated especially within rural areas, however, in the urban areas, its functions, services and benefits remain rather unexplored and underestimated. Moreover, the currently used methods for assessing the ecosystem services reflect the geodiversity and geoheritage values marginally.

An interdisciplinary project “Geodiversity within urban areas: perception, function, potential” (in fact, a pilot study covering two Czech cities – Brno and Liberec) aims at these points:

- 1) geodiversity’s influence on urban development (including geohazards)
- 2) relationships of geodiversity and archaeological/historical/architectonic aspects
- 3) geodiversity and geoheritage assessment within the concept of ecosystem services (with an emphasis on cultural and knowledge services), analysis of the current use of these services
- 4) perception of geodiversity and geoheritage functions and services by the urban population
- 5) identifying sites of geotourist interest, designing particular geotourist and geoeducational activities
- 6) identifying sites of geoconservation interest with an aim to declare them as protected by law

The project involves a large spectrum of participants: universities (Mendel University in Brno, Technical University in Liberec), research institutions (Institute of Geonics of the Czech Academy of Sciences, Archaia), municipalities and tourist offices of Brno and Liberec and Nature Conservation Agency of the Czech Republic. The municipalities, tourist offices and NCA will directly use the results for the purposes of nature conservation and geotourism development. The outcomes of the project will help to recognize the importance of geodiversity in urban areas and serve as a justification for developing strategies focused on geodiversity and geoheritage and incorporating them into the urban planning documentation.

References:

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