

Conservation through conversation – a brief review of geoconservation issues and initiatives from Vojvodina Province, North Serbia

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Nature consists of two equal parts, a living one – biodiversity, and its abiotic (non-living) equivalent – geodiversity (Gray 2008). Geodiversity is a shortened version of the phrase 'geological and geomorphological diversity' and has been defined as '*the natural range (diversity) of geological (rocks, minerals, fossils), geomorphological (land form, processes) and soil features*' (Gray 2004, p.8). The endeavour of trying to conserve and enhance geodiversity (concrete examples of it which may be specifically identified as having conservation significance) is widely accepted as geoconservation (Burek & Prosser 2008). In most cases, nature conservation is associated with the protection of biodiversity as the most vulnerable element of natural environment. Unfortunately, there is a general thought (among geosciences community) of neglecting of geodiversity conservation in favour of biodiversity, as its conservation has a long tradition and as it is a fundamental part of the Earth's life support system. Although geoconservation (conservation of significant elements of geodiversity) has been practiced for over 100 years, it was usually the "Cinderella" of nature conservation regarding better appreciation of biotic natural segments as most people associate nature conservation with the protection of biodiversity (Gray 2004).

In order to change this broad opinion, the key geoconservation components should include understanding and valuing the geological sites through widely used methods that include interpretative activities to general public (Vasiljević et al. 2011). A new form of communication that can help people raise awareness on geodiversity values (aesthetic, scientific, functional, economic) and threats (vulnerability, human activities, natural processes) is defined as geotourism. Evidently, geotourism has much broader and complex meaning, as it is defined as "the provision of interpretative and service facilities to enable tourists to acquire knowledge and understanding of the geology and geomorphology of a site (including its contribution to the development of the Earth sciences) beyond the level of mere aesthetic appreciation" (Hose 1995, p.17). Therefore, geodiversity interpretation focuses on communicating the significance of the geological resource or geosite to visitors. As such sites may be easy and interesting to geoscientists, they are generally hard for non-specialists. Thus, the main task should be explaining the meaning and significance of geological sites to the tourists that visit.



Figure: Organised visit of geoscientists and geo-lovers to remarkable and unique loess-palaeosol sequences in Ruma brickyard on Fruška Gora Mountain (Photo: Dj. Vasiljević)

The case study of this work is Autonomous Province of Vojvodina, a region in northern Serbia, located in the south-eastern part of the Carpathian (Pannonian) Basin and encompassing the confluence area of the Danube, Sava, and Tisa rivers. Serbia is a country with long history of nature protection, having roots even in the 14th century. Unfortunately, this long lasting tradition has not resulted in efficient and stable conservation system, as only 518,200 ha or 5.86% of its territory is under governmental protection, which is amongst the lowest percentages in Europe. Vojvodina region follows this trend with total protected area of 5.47 % within 131 protected assets (1 National Park, 13 Special Nature Reserves, 8 Strict Nature Reserves, 91 Natural Monuments, 2 Landscapes of Outstanding Features, and 7 Nature Parks). Geoconservation and geotourism are still new and unclear terms, which are poorly and insufficiently practiced in this area. This resulted in only 9 geoheritage sites - protected assets due to its significant geodiversity. Seven of them are within Fruška Gora National Park with Deliblato Sands and Titel Loess Plateau remaining outside this area.

It is more than evident that “Cinderella effect” is also present in this region, with far more concern on living part of natural environment. Infrastructure, logistics and expertise on geoconservation is still in its initial stage or very poor (Hose & Vasiljević 2012). Therefore, this study presents an overview of the most valuable geoheritage of the Vojvodina region with an insight into the general condition of these areas through their geoconservation issues, visitor management and geotourism. Great consideration will be put on current problems and proposals on improvement and initiation of geoconservation and geotourism of the presented area.

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