

Assessment of tourism value in geological heritage: why, what and how

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Nature tourism has been a subject related with geological heritage and geoconservation during the years, moreover with the increasing of geotourism strategies and geoparks programs. Even if only a part of geological heritage has high scientific value, there are also other sites that should be considered in geoconservation strategies because of their cultural, ecological or tourism values (Brilha 2016). The use of geological heritage as tourism attractions constitutes one of the subjects in methodological proposals for geosite assessment. Whereas the majority of the methodological proposals include touristic criteria to assess the values of geological heritage (Pereira, Pereira 2010), more recent studies emphasize the assessment of specific criteria such as accessibility, visibility, safety, signage, cleanliness, logistics, or the touristic use of the sites (Rybár 2010; Štrba, Rybár 2015; Doktor *et al.* 2015; Valjarević *et al.* 2017).

In this work, a general framework of this topic is presented, with a discussion on the objectives (why), the objects (what) and the methods (how) regarding the assessment of the tourism value in geological heritage. Why is related with the need to identify the sites with highest potential touristic use, the ones more prone to degradation with touristic use, and the procedures to enhance the visit conditions and tourism attractiveness. What can be connected with the geological heritage features to be assessed, implying the selection of sites and the procedures related with the dimension of geosites (single spots, large areas, viewpoints). How respects with the methods to assess the tourism value, that can comprise qualitative or more quantitative procedures and different criteria regarding the touristic use of the sites.

Recent studies in geoparks, supported in this 'why, what and how' approach (Pereira, Pereira 2012; Gonçalves 2013; Viveiros 2016), have revealed that the data obtained are essential tools to

geoconservation and geotourism strategies in territories where geotourism plays a substantial role. In that sense, similar assessment methodologies are being applied in Peneda-Gerês National Park in Portugal, a protected area with high standards in nature conservation but also with high tourism attractiveness (Afonso, Pereira 2018).

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