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SCIENTIFIC RESEARCH ON GEOMORPHOSITES. A REVIEW OF THE ACTIVITIES OF THE IAG WORKING GROUP ON GEOMORPHOSITES OVER THE LAST TWELVE YEARS

ABSTRACT: REYNARD E. & CORATZA P., *Scientific research on geomorphosites. A review of the activities of the IAG working group on geomorphosites over the last twelve years.* (IT ISSN 0391-9838, 2013).

During the last two decades a renewed interest emerged in the scientific community for geoheritage, geoconservation and geotourism research. This was the reason for the International Association of Geomorphologists (IAG) for creating a specific working group (WG) on geomorphosites, that is the geomorphological part of geoheritage, in 2001. This paper reviews the main improvements made in the field of geomorphosite research during the period 2001-2012. A first domain of research concerned conceptual studies, in particular the definition of geomorphosites and the question of their value, as well as the links between geomorphological heritage and geodiversity. Some members of the WG also developed specific methods to assess geomorphosites and proposed guidelines for their mapping and the realisation of geoproducts. The work carried out during the last decade allows us to propose new perspectives, in particular on scale issues, the relationships between geoheritage and geodiversity assessment, the elaboration of guides of practices, and the integration with other disciplines (social and educational sciences, computer sciences, process geomorphology).

KEY WORDS: Geomorphosites, Geomorphological heritage, Assessment, Mapping, Geotourism.

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INTRODUCTION

The whole Earth surface is made of landforms; some of them are difficult to detect (*e.g.*, microtopographical forms in lowland areas), others are very spectacular (Migon, 2010) and catch the eye, and some are even recognised by UNESCO as World Heritage Sites for their geomorphological value (Migon, 2009; Panizza, 2009; Badman, 2010). Spectacular landforms (*fig. 1*) have attracted humans since immemorial times (*e.g.*, Uluru in Central Australia, see Twidale, 2010; the Bandiagara escarpments in Dogon land, Mali, see Le Drezen, 2008; the Machu Pichu Inca sanctuary, Peru, see Vilímek & *alii*, 2007). The initiation of tourism in several parts of the world was influenced by the presence of impressive landforms (glacial landscapes in the Alps; Reynard & *alii*, 2011) and the first national parks in Northern America were created in the 1870s in areas with beautiful mountain landforms (Héritier & Laslaz, 2008).

Since the 1990s, a growing interest for the heritage value of geology and geomorphology has been observed in several parts of the world, in relation to geoconservation (Martini, 1994; Gray, 2004; Burek & Prosser, 2008), geotourism (Dowling & Newsome, 2006), and geopark issues (Zouros, 2004). In this context, during the 5th International Conference on Geomorphology held in Tokyo in 2001, the International Association of Geomorphologists (IAG) decided to create a specific working group (WG) on Geomorphological Sites, with the aim to improve knowledge and scientific research on the definition, assessment, mapping, promotion and conservation of geomorphological heritage. The WG is chaired by the two authors of this paper, experiences have been shared during several workshops and international conferences, and results have been collected in several special publications (*tab. 1*). Several intensive courses for Master and Ph.D students have also been organised in Bagnes, Switzerland (2006), Lesvos,