A method for assessing the intrinsic value and management potentials of geomorphosites

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In 2007, we have proposed a method for assessing the scientific and additional values of geomorphosites (Reynard et al., 2007). The evaluation methodology was divided in two steps: the evaluation of the scientific value of pre-selected sites, based on several criteria (rareness, integrity, representativeness, interest for reconstructing the regional morphogenesis), and the assessment of a set of so-called additional values (aesthetic, economic, ecological, and cultural). The method has proved to be quite robust and easy to use. The tests carried out in several geomorphological contexts allowed us to improve the implementation process of the method, by precising the criteria used to assess the various values of selected sites. Nevertheless, two main problems remained unsolved: (1) the selection of sites was not clear and not really systematic; (2) some additional values – in particular the economic value – were difficult to assess, and others, not considered in the method, could be evaluated (e.g. the educational value of sites).

These were the factors for launching a series of modifications of the method that are presented in this poster. First of all, the assessment procedure was divided in two main steps: (1) the evaluation of the intrinsic value, in two parts (the scientific and additional values, limited to three kinds of values – cultural, ecological, aesthetic); (2) the documentation of the present use and management of the site, also divided in two parts: the sensitivity of the site (allowing us to assess the need for protection), and a series of factors influencing the (tourist) use of the site (visit conditions, educational interest, economic value). Secondly, a procedure was developed to select the potential geomorphosites – that is the sites worth to be assessed using the evaluation method.

The method was then tested in four regions in the Swiss and French Alps: the Chablais area (Switzerland, France), the Hérens valley (Switzerland), the Moesano valley (Switzerland), where a project of national park is in preparation, and the Gruyère – Pays-d’Enhaut Regional Nature Park (Switzerland).

The main conclusion of the research is that even if a full objectivity in the evaluation process is difficult to reach, transparency is essential almost at 3 stages: (1) the selection of potential geomorphosites: it is important to develop criteria and a method for establishing a list of potential geomorphosites; in this study, we propose to carry out the selection by crossing two dimensions: a spatial one (the selection should reflect the regional geomorphological history); (2) the assessment of the intrinsic value of the selected geomorphosites, by the establishment of clear criteria for carrying out the evaluation; (3) the development of a clear management strategy oriented to the protection and tourist promotion of the sites and based on the precise documentation of management potentials and needs, according to the assessment objectives.

Reference