A method for selecting potential geosites. The case of glacial geosites in the Chablais area (French and Swiss Prealps)

Amandine Perret (1,2) and Emmanuel Reynard (1)

(1) Institute of Geography and Sustainability, University of Lausanne, Mouline-Geopolis, CH–1015 Lausanne (amandine.perret@unil.ch), (2) EDYTEM Laboratory, University of Savoie, Campus Scientifique, F–73376 Le Bourget du Lac

Since 2009, an Interreg IVA project (123 Chablais), dealing with the promotion of natural and cultural heritage in the Chablais area, has been developed. It is linked to the creation of the Chablais Geopark. In a context of development of smart forms of tourism, the objective was to develop a strategy promoting the glacial heritage to a wide public in an area where the glaciers have almost disappeared.

The recognition of specific places as geoheritage is the result of a double process: a scientific one, based on more or less sophisticated methods, and a social one, that is the acknowledgment by the society. One of the first scientific tasks is to produce a list of “potential geosites” that will be assessed in more details. However, this selection is often a weak point of inventories. It often seems like a “black box” without any transparency.

In this project (123 Chablais) we carried out an inventory of glacial geosites, using the method developed by Reynard et al. (2007, 2012). However, a method has been created to enlighten the selection process, and to enhance choices in geoheritage management. As it was not possible to consider all sites in the Chablais area, a mixed selection approach was developed, halfway between completeness and specificity (Martin, 2012). The first step was the creation of a list of “points of interest”, established using different sources: literature review, fieldwork and use of GIS to cross information. A selection was then performed according to two criteria: correspondence with a glacial stage (time axis) and belonging to a type of forms (spatial axis). Finally, selected sites aimed at providing a representative overview of the regional glacial witnesses. Therefore, representative sites of the regional geology were selected as well as sites presenting regional peculiarities.

Temporal and spatial attributes were given to the 101 points of interest identified. From a temporal point of view, this inventory aimed at presenting the main stages of the glacial retreat since the Last Glacial Maximum. From a spatial point of view, the objective was to show the different types of glacial remnants, but also some landforms related to deglaciation processes. Finally, 32 glacial and associated geosites were selected. Each geosite was submitted to a full evaluation process, including basis information, description, explanation of morphogenesis and an evaluation of values assigned to geosites. This assessment, first qualitative, provided valuable information concerning their intrinsic interest and their management. A numerical evaluation was also assessed to classify geosites and define an order of priority for their touristic promotion.

It is worth to be noted that each selected points of interest can in fact be qualified as a geosite, using a clear method of selection. In this study, the numerical evaluation is not a mean to select geosites but a way to rank one geosite to another. Some geosites can be abandoned if intrinsic values are too low. Despite a well-defined protocol, the subjectivity and authors’ choices are part of the selection process and inventory. This fact is certainly not a weakness. It must be considered whenever such inventory is made.

Reference