

GEOCONSERVATION AND EDUCATION FOR SUSTAINABILITY: AN EXAMPLE BASED IN THREE PORTUGUESE PROTECTED AREAS

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The Peneda-Gerês National Park was the first protected area created in Portugal, just after the celebration in 1970 of the European Year of Nature Conservation. During the last thirty years other protected areas were created but having one common limitation: park managers do not consider geoconservation as a nature conservation strategy. Most of the Portuguese protected areas geosites remain without a proper identification, characterisation, and conservation. This work does not intend to discuss the reasons for this situation but rather to show some efforts made by universities towards the use of protected areas for geological education. Three examples will be presented based in Master theses developed in protected areas with different geological settings.

In northern Portugal, the Peneda-Gerês National Park (about 700 km²) is located in a mountainous region dominated by granitic rocks. This park constitutes an excellent educational resource due to the occurrence of relevant geosites mainly related with granitic geomorphology and petrology. Two Master theses explore pedestrian trails and turn them suitable to be used by students, teachers and other visitors. In central Portugal, the Serras de Aire e Candeeiros Natural Park (about 400 km²) plays an essential role as being the most important national karst system. About seventy geosites with didactic relevance were selected mostly dedicated to karst, sedimentary, palaeontology, and tectonic features. Finally, the Sudoeste Alentejano e Costa Vicentina Natural Park (about 600 km²), located in the southwest region of Portugal mainland, exhibits magnificent exposures of diverse metasedimentary and sedimentary rocks.

The work done in these three protected areas followed a similar methodology: 1. Identification and characterisation of geosites with didactic relevance; 2. Development of educational strategies; 3. Production of materials such as guidebooks, leaflets, and web pages.

This work allows an increase of geology awareness, not only of general public and schools but also of park managers. These examples should be enlarged to other protected areas as part of a national strategy for the education towards sustainability.