

GIODIVERSITY AND GEOLOGICAL HERITAGE CHARACTERISATION IN PROTECTED AREAS FROM NE PORTUGAL: METHODOLOGY AND RESULTS

G. DIAS¹, M.I.C. ALVES¹, J. BRILHA¹, P. CASTRO², N. FERREIRA², C. MEIRELES², D.I. PEREIRA¹, E. PEREIRA², P. PEREIRA¹ & Z. PEREIRA²

1. Earth Sciences Centre, University of Minho, Portugal,

2. Geology Department, INETI, S. Mamede de Infesta, Portugal

E-mail: graciete@dct.uminho.pt

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We intend to present the methodology and main results of a multidisciplinary research project carried out in two protected areas from NE Portugal: the Montesinho (PNM) and International Douro (PNDI) Natural Parks (PNM 750 km², PNDI 851 km²). Both Natural Parks are located in a region characterised by a remarkable geodiversity and by the occurrence of exotic terranes, as well as notable geomorphological features.

This project aims to: (i) improve the geological knowledge in the PNM and PNDI; (ii) proceed with the inventory and characterisation of geosites; (iii) create scientific instruments to support a sustainable management of resources and territory; (iv) contribute to the increase of public awareness of Natural Heritage.

In order to achieve these objectives, the following activities were developed in the two protected areas: (i) improvement of the geological mapping; (ii) characterisation of geomorphological features and processes at a regional scale and development of the geomorphological mapping; (iii) inventory of geological resources; (iv) systematic inventory and characterisation of geosites, with reference to its content, value, utility and relevance, and their integration in a database; (v) characterisation of geological materials through specific studies, as a support for mapping and geosites characterisation.

As results of the project, deliverables are being made available to the managers of each natural park as scientific support for management plans in these areas, namely: geological and geomorphological maps at 1:100 000 scale; geological resources map; geosite map with a synthesis of the characterisation parameters. Furthermore, this project is providing several products with the purpose of increasing public awareness of geodiversity and geoconservation. Among these outputs we emphasise interpretative panels, geological guides and booklets for either specific geosites or trails, and web pages. Two additional initiatives are being developed in the scope of this project: the training of staff from the two Natural Parks who, in the future, will be guiding field trips; and the organisation of summer field trips in the region, addressed to the general public.

The experience obtained with this project shows that comprehensive projects like this one should be applied to other Portuguese protected areas where the knowledge and management of geological heritage is still far from adequate.