

Geological heritage legal frameworks in Naturtejo Global Geopark

Joana Rodrigues & Carlos Neto de Carvalho

Geopark Naturtejo da Meseta Meridional – European and Global Geopark. Gabinete de Geologia e Paleontologia, Centro Cultural Raiano. Avenida Joaquim Morão, 6060-101 Idanha-a-Nova. joana225@sapo.pt.

In Portugal, despite of the new Law of Nature Conservation (Decree Law 142/2008), geoparks are not considered Protected Areas and must find the application of legal tools to protect their geological heritage. New legislation presents the term *Geosite* and requests an Inventory of National Geosites, under preparation, being Natural Monument still the best figure to protect geological heritage. Since 2008 Geoparks are recognized by law with an international status but there isn't any management plan for Geoparks. Inside Portuguese geoparks, legal protection of geological heritage must be supported by several frameworks, such as cultural heritage (Law 107/2001), protected areas or municipal protection under Municipal Management Plans.



Naturtejo Geopark is a European and Global Geopark, under the auspices of UNESCO, being located in the Center of Portugal and Alto Alentejo, at the borderland with Extremadura, with 4617 km² that promotes geodiversity through more than 170 geosites, 16 defined as geomonuments due to their high relevance, and monumental character, which represent the geological dynamics of the region since Neoproterozoic (~600 Ma). This geological heritage is the basis of the geopark, of its local development strategy based on Geoconservation, Education and Geotourism.

Protected Areas

Tejo Internacional **Natural Park** (includes 6 geosites, for example Erges Canyon (a) and Touro Mine (b)) has a management plan with several protection levels and restriction measures. Geological heritage was not clearly defined but geological values are recognized and their damage can be punished.

Portas de Ródão **Natural Monument** (c) doesn't have management plan but regulates and restricts human activities aiming the protection of natural values, such as geology, geomorphology and paleontology with biodiversity and cultural landscape. It includes 19 geosites and Conhal do Arneiro roman mine geomonument (d).



Cultural Heritage



Cultural heritage Law addresses relevant values such as paleontological, archeological and scientific ones. These cultural sites can be protected by the Portuguese state, like Monsanto National Monument (a) which is also a geomonument and includes 6 other geosites within the special protection area. But also municipalities can act locally protecting and managing places like in Idanha-a-Nova municipality's Penha Garcia fluvial gorge (b), for example, restricting fossil hunting and promoting geoheritage awareness.

Natura 2000 Sites

This EU framework is not restrictive concerning geological heritage and some rules are imposed by other figures defined under municipal management plans. From 28 geosites inventoried in the 3 Sites 11 are more effectively protected under Portas de Ródão Natural Monument which overlaps S. Mamede Site. Gardunha Granite landforms (a, b) and Arez Mushroom rocks (c) are included in Natura 2000 Sites.



Other frameworks

Geosites like Portas de Almourão, Portas de Ródão or Penha Garcia have also international recognition as Important Bird areas. This framework with Special Protection Zones concern only avifauna values of the geosites.

Further protection measures at Naturtejo Geopark



There are being prepared new protection measures for Portas de Almourão (a) and Fraga da Água d'Alta waterfall (b), geomonuments.

