

## The Côa Valley Ecosystem (Douro, Portugal) as a Cultural Landscape. Approach to the Management Challenges

**Authors :** Mariana Durana Pinto, Thierry Aubry, Eduarda Vieira

**Abstract :** The Côa River is one of the tributaries of the Douro River, which in turn connects two Portuguese regions: Beira-Alta (Serra das Mesas, Sabugal) and Trás-os-Montes (Douro River, Vila Nova de Foz Côa). The river, which is approximately 140 kilometres in length, is surrounded by characteristic Northern-Eastern Portugal landscape. The dominant flora in the region includes olive and almond trees and vines, which provide habitat for a diverse range of native species. These include mammals such as the lynx and Iberian wolf, as well as birds of prey such as the Egyptian vulture and the griffon vulture. Additionally, herbivorous species such as red deer and roe deer also inhabit the region. However, the Vale Côa is inextricably linked with the rocky outcrops bearing the emblematic open-air Upper Palaeolithic rock art, indeed, it houses the world's largest collection of prehistoric open-air rock art, inscribed on the World Heritage list by UNESCO in 1998. From the initial discovery of the first engravings in 1991 to the present day, approximately 1,500 panels with rock art, mostly engravings and carving, but also some paintings, have been discovered, inventoried and recorded spanning from early Upper Paleolithic to the 20th century. The study and interpretation of the engravings and its geoarchaeological context, allow the construction of a chronological timeline of the human occupation and graphical production in this region. The area has been inhabited since the Early Palaeolithic, with human communities exploiting the diversity of the natural resources of the environment and adapting it to their needs. This led to the creation of an archaeological and historical cultural landscape. The region is currently inhabited by rural communities whose primary source of income is derived from agricultural activities, with a particular focus on olive oil and wine production, including the emblematic Vinho do Porto. Additionally, the region is distinguished by activities such as stone exploration and extraction (e.g. schist and granite quarries) and tourism. The latter has progressively assumed a role in the promotion and development of the region, primarily due to the engravings of the Côa Valley itself, as well as the Alto Douro Wine Region. Furthermore, this cultural landscape has been inscribed in the UNESCO World Heritage Site in 2001. The aforementioned factors give rise to a series of challenges and issues pertaining to the management and safeguarding of rock art on a daily basis. These include: I) the management of conflicts between cultural heritage and economic activity (between Rock art and vineyards, both classified as World Heritage Sites); II) the management of land-use planning in areas where the engravings are located (since the areas with engravings are larger than those identified as buffer zones by UNESCO); III) the absence of the legal figure of an 'archaeological park' and the need to solve this issue; IV) the management of tourist pressure and unauthorised visits; and V) the management of vandalism (as a consequence of misinformation and denial).

**Keywords :** Douro and Côa Valleys, archaeological cultural landscapes, rock art, Douro wine, conservation challenges

**Conference Title :** ICAHCM 2025 : International Conference on Archaeology, Heritage Conservation and Management

**Conference Location :** Budapest, Hungary

**Conference Dates :** August 23-24, 2025