

# *GEOMINING HERITAGE IN NATURTEJO GEOPARK (PORTUGAL) – THE ROLE OF TEMPORARY EXHIBITIONS FOR CONNECTING LOCAL COMMUNITIES WITH GEODIVERSITY*

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Naturtejo Geopark has a wide geodiversity with recognized Geomining Heritage whose marks were left in the landscape for more than 3000 years without significant environmental impacts. In the last two centuries 110 mining concessions existed at the Geopark territory together with hundreds of non-formal explorations for cassiterite and wolframite during the Second World War and the beginning of the Cold War. Nowadays there are no active mines in Naturtejo Geopark. Geological resources contribution for economy was resumed to granites quarrying with secular tradition at Alcains (the land of stonemason workers) and at Alpalhão, bottled water at S. Vicente da Beira and thermal springs at Termas de Monfortinho and Fadagosa de Nisa, besides prospection of mineral resources, mostly gold.

The aim of Naturtejo Geopark is to disclose the wonders of mineralogy and mining geology providing at the same time information about the social and environmental impacts of mining activity, both positives and negatives, in order to prepare communities for important decisions regarding land management and sustainable local development. One of the recent approaches of Naturtejo Geopark is to revitalize old stories and techniques about mining, including the know-how of old miners told by them (Fig. 1a).

Segura Mining District was one of the most important districts of the region, where barium, tin, lead and wolfram were exploited during the first half of the 20th century. There are large areas of tailing piles, galleries and shafts still around, as well as the last remains of the machinery and the old washing factory. The exhibition “When we went for ore” (= “Quando a gente andava ao *menério*”) dedicated to Segura Mines is a part of a long term project that has been developed in Idanha-a-Nova municipality. For one year this exhibition was in Centro Cultural Raiano, the headquarters of Naturtejo Geopark at Idanha-a-Nova, and it is structured in two sections: formal and non-formal domains vs. history and memory. During this period there was an Educational Program, for the different schools levels, specially designed for interacting with the exhibition and mineral resources exploited in these mines. This educational program included a visit to a mine, recreational activities and workshops about minerals, mineral resources uses in the daily life and jewelry. All the students from kindergarten to primary schools from Idanha-a-Nova participated in this educational program (Fig. 1b), involving more than 600 pupils. The next stage for the exhibition is to become nomad. It is now travelling through the main mining contexts of Idanha-a-Nova. The core of the exhibition is the same only the contents are adapted to the geological and mining context and local specificities, involving local people. The end of the journey will be Segura where all the contexts will be joined and it will be presented a completed exhibition of Geomining Heritage in Idanha-a-Nova, including an oral archive of the memory and a collection made of offers and loans.

The exhibition “Geomining Heritage from Oleiros” was dedicated to Fragas do Cavalo wolfram mines that worked in the first half of the 20<sup>th</sup> century, with a small note about other mining in Oleiros since Roman times. Nowadays, in these mines we can see a wide and steep slope 150 m high full of pits and galleries, some collapsed, others with quartz veins full of wolframite crystals, wood shoring and tailing piles at the mouth of the mine. The documentary “Black gold – the other side” was prepared with a geological, historical and anthropological approach and

the testimony of former miners and workers of the mines. In parallel the catalog “Wolfram times in Oleiros” was released to present this unknown heritage to most of the people by showing the importance of the mine in this period when the region was tightly connected with the major world moments of contemporary history. During the European Geoparks Week additional activities were provided such as guided visits and workshops for local schools, guided visits with former miners and workers and a thematic visit to Fragas do Cavalo Mines, with the participation of former workers from the washing factory.

These two projects are linked by the theme of the rush for wolfram during the “black gold” periods, with the climax during the Second World War, that moved thousands of farmers-miners searching for cassiterite (tin) and wolframite (wolfram) in mining districts and illegally, creating parallel markets and contraband at the borderland. But they are also connected through the impact they are causing in local communities that remembered or known the importance that those mines had in the past, increasing their interest and the sense of belonging.



Fig. 1 – Exhibitions and exhibition activities involving local communities: a) educational program for local pupils (Centro Cultural Raiano); b) direct contact with locals’ know-how and discussion in the outcrop.