

GEOTOURIST TRAILS IN GEOPARK NATURTEJO

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1. Pedestrian Trails

Geopark Naturtejo promotes geodiversity through 16 *geomonuments* or geosites with high relevance and monumental character, which represent the geological dynamics of the region since Proterozoic (ca. 600 million years) times. This outstanding geodiversity can be discovered through signalled pedestrian trails, boat and kayak trips, mountain bike rides, adventure sports (slide, rappel, hiking), thematic visits (Visit to the Granite Boulders, Visit to the Roman Gold Mine, Visit to the Holy Waters, etc) and educational programmes.

Pedestrian trails are a nature-friendly activity made in natural or traditional paths and signalized allowing to the trekkers to walk through mountains, valleys, plains, forests, and farms and, at the same time, evolving them in the Nature. This activity has been growing very fast in Portugal and almost all the municipalities are investing to develop trail networks, one of the best ways to really and deeply know a territory, its nature and history.

Pedestrian trails make the pedestrianists raise awareness for Geodiversity which composes the landscapes. Sometimes these trails are the unique access to some important geosites, which tell the geological history of a region.

2. Geotourist Trails

In the Geopark Naturtejo, there are 439 km of signalled pedestrian trails and footpaths along all the multiple richness of the territory, including geodiversity, biodiversity, history and culture. As one of the most important trekking areas in Portugal, these paths transport the visitors not only through the landscapes but also into Time...

Of these 439 km, 103 km have relevant geological interest – Geotourist Trails (Table 1) and can be explored in educational programs and geotourist routes (Fig.1), being mainly dedicated to geological themes, such as fossils, mines or landforms. In these specific trails not only the Geodiversity is exploited but also the related historical and cultural aspects and the biodiversity which altogether compound the Geopark's territory.

2.1. Interpretation

The interpretation is essential in this strategy and can be done through guided visits that give to the visitor a personalized visit, full of personal stories with the interpretation adjusted to the specificities, or through panels in signalled trails. The trekker finds all over the trails signs from the Portuguese Pedestrianism Federation and also some interpretative panels that add information and help the visitor to learn the landscape (Fig.2). The panels, the leaflets and the signs provide information and interpretation to the trekker in a self-guided visit.

3. Local development through Pedestrian Trails

Pedestrian trails are somewhat a new niche in Portugal that is acquiring increasing number of participants that come not only from all the country but also abroad. These trekkers come to Geopark Naturtejo from everywhere with the propose of walk and for this they need tourist infrastructures like restaurants, tourism offices, lodging, shops to support their visit.

The "Fossils Trail" in Penha Garcia was the beginning of several improvements in the village tourist infrastructures. The trail was created in 2003 and, in the year of 2008, was visited by

11500 trekkers. During the last years several traditional houses and the Templar castle were recovered, the “Casa de Santa Margarida” guest house was opened by a local entrepreneur, and the Outdoor Company “Trilobite.Aventura” has started.

Castelo Branco		km
PR1 CTB Rota da Gardunha		17,5
PR2 CTB Caminho do Xisto de Martim Branco		9,5
PR3 CTB Caminho do Xisto de Sarzedas		15
	Total	42

Idanha-a-Nova		
PR1 IDN Rota dos Abutres		10,5
PR2 IDN Rota da Egitânia		8,5
PR3 IDN Rota dos Fósseis		3
PR4 IDN Rota das Minas		10
PR5 IDN Rota dos Barrocais		7
GR12 IDN Rota da Idanha		80
GR22 Rota das Aldeias Históricas		50
GR29 Rota dos Veados		30
	Total	199

Oleiros		
PR1 OLR Caminho do Xisto de Álvaro		7,3
PR2 OLR Caminho de Xisto de Álvaro		6,3
PR3 OLR GeoRota do Orvalho		9
	Total	22,6

Proença-a-Nova		
PR1 PRN A história na Paisagem		8,3
PR2 PRN Os Segredos de Vale Mourão		6,5
PR3 PRN Rota das Conheiras		10,6
PR4 PRN Pela linha da Defesa		14,5
PR5 PRN Rota dos Recantos e Encantos		11,4
PR6 PRN Viagem pelos Ossos da Terra		18
PR7 PRN Rota dos Estevais		7,8
PR8 PRN Caminho do Xisto de Figueira		6
	Total	83,1

Nisa		
PR1 NIS Trilhos das Jans		12,6
PR2 NIS Descobrir o Tejo		4,3
PR3 NIS Olhar sobre a Foz		5,8
PR4 NIS Trilhos do Conhal		9,8
PR5 NIS À descoberta de S. Miguel		9,2
PR6 NIS Rota dos Açudes		10,6
PR7 NIS Entre as Azenhas		6,5
PR8 NIS Trilhos do Moinho Branco		14
	Total	72,8

Vila Velha de Ródão		
PR1 VVR Rota das Invasões		8
PR3 VVR Caminho do Xisto “Voo do Grifo”		11
	Total	19

Total	km
Castelo Branco	42
Idanha-a-Nova	199
Nisa	72,8
Oleiros	22,6
Proença-a-Nova	83,1
Vila Velha de Ródão	19
	438,5
Pedestrian Trails	438,5 km
Geotourist Trails	102,4 km

TABLE 1: List of the Pedestrian Trails in the Naturtejo Geopark.

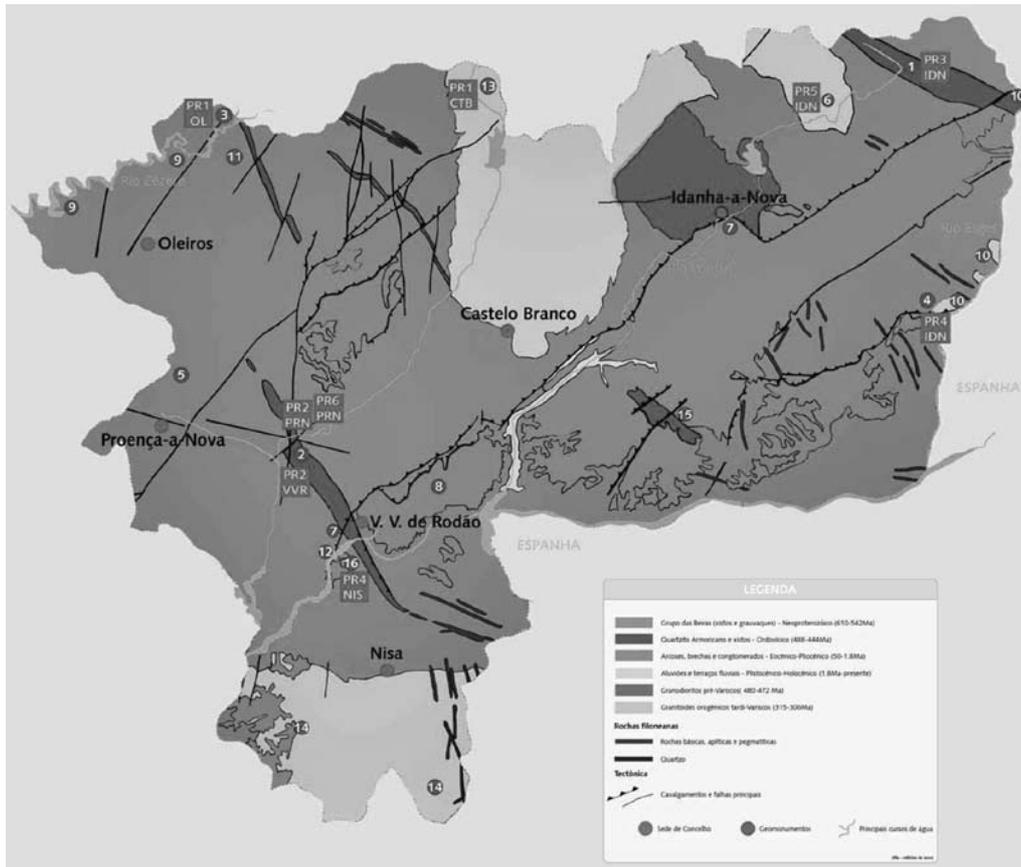


FIGURE 1: Geotourist Map of Naturtejo Geopark with Geotourist Trails Localization.

In Orvalho village it was recently opened the trail “GeoRota do Orvalho” that is bringing cents of people to a village with two geomonuments among an important natural heritage but without tourist infrastructures. Nowadays, several investors are preparing strategies to receive these visitors all over the year. It is already being prepared a new pedestrian trail to increase the offer to this kind of geotourists.



FIGURE 2: Geopark trails: a –Signalization on Gardunha Trail, b – interpretative panel in the Fossils Trail..

4. Geotourist trails

4.1 .Gardunha Trail (17,4 km)

Geological interest points: boulder fields, granite morphologies, water springs, Ocreza valley, Cordilheira Central mountain range. This trail takes to the top of Serra da Gardunha, passing by rocks sculpted by weathering and erosion agents, pure and cold water springs, and waterfalls showing crystal-like water running and by water mills hidden by lush flora.

4.2.Fossils Trail (3 km)

Geological interest points: trace fossils, Ponsul fluvial gorge, Penha Garcia-Cañaverl Syncline, tectonic folds and faults, sedimentary structures. Walking through Penha Garcia village and Ponsul river valley is possible to understand the profusion of marine life that inhabited Earth, in this area, almost 500 million years ago. From Ocean to the mountain, the geological evolution of a unique landscape, from history of people and from a special culture rooted in Nature.

4.3. Mines Trail (10 km)

Geological interest points: mines, washing plant, mineralization, metamorphic contact granite-schist, Segura Fault. Through Erges river steeps the visitor finds ancient mining ore of tungsten, tin, lead, gold, barite and sees traces of technological evolution for mining exploitation.

4.4. Boulders Trail (7 km)

Geological interest points: *inselberg*, granite morphologies at meso- to mega-scales, chemical weathering, Castelo Branco Plain Surface, granite lithofacies. Walking through the typical granite landscapes with boulders of Monsanto visitor finds amazing and imposing landforms sculpted by erosion across times. Starting from the “Most Portuguese Village” it unravels all the evolution that granite rocks suffered since their formation deep in Earth, until their final exposure in a granite “archipelago” that stands slashed from the schist acrid plain.

4.5. “Conhal” Trails (9,8 km)

Geological interest points: Tejo epigenic gorge, iron and gold mines, Ponsul Fault, Arneiro Graben, quartzite ridges, arkoses and fluvial terraces. Crossing hills, contemplating the silent flight of birds and appreciating geological phenomena of Serra de S. Miguel is what the visitor can do along this trail, while appreciating Tejo valley, Portas do Rodão Natural Monument and Roman remains of the giant Conhal do Arneiro gold mine.

4.6. Secrets from Almourão Valley (6,5 km)/Travel across the Bones of Earth (18 km)

Geological interest points: Variscan tectonics (folds and faults), Ródão Syncline, Ocreza River gorge, mines, fossils. There is no better perspective of the deep Almourão gorge and of the Portas do Almourão Geomonument than from these trails, by the marvelous natural landscapes viewed from thematic viewpoints. Quartzite shows up here as a powerful upstanding rock, with an ancient history that reveals the build of a mountain that Ocreza river ripped in his path, across time.

4.7.Schist’s Path “Vultures Flight” (11 km)

Geological interest points: tectonic folds and faults, Ocreza fluvial canyon, fossils, Talhadas mountain. This is a trail trough outstanding natural landscapes framed by Talhadas mountain incised by Ocreza river valley through the geomonument Portas de Almourão, a site with rocks of about 500 million years old filled with traces of an Ocean that once existed here.

4.8. Orvalho Trail (7 km)

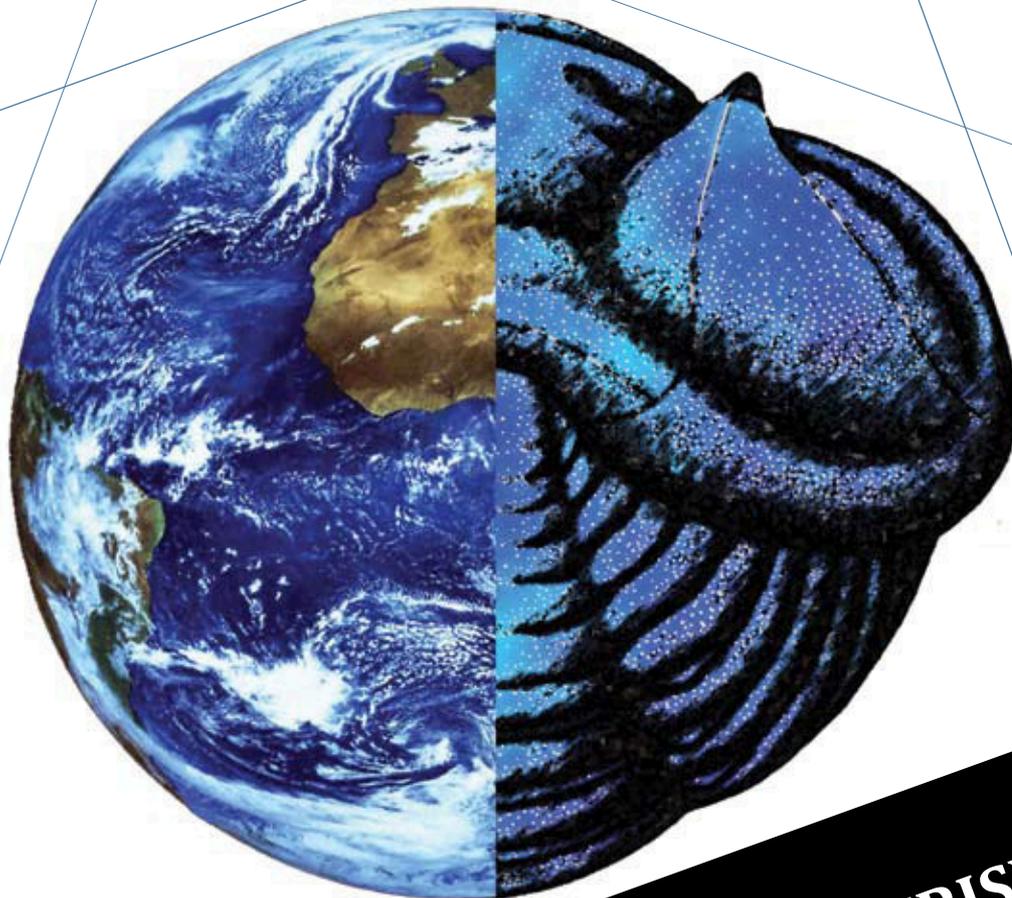
Geological interest points: Fraga da Água d'Alta waterfalls, Água d'Alta stream, "Laurissilva" forest remains, Cabeço Mosqueiro viewpoint, Penedo das Sardas Rock. Walking along this trail the visitor crosses Água d'Alta stream valley with the last remnants of "Laurissilva" pre-Glacial forest and a succession of cascades in Fraga da Água d'Alta, where the water was stronger than the rock. The energy spent by climb to the Cabeço Mosqueiro viewpoint is rewarded with the magnificent scenery over the surrounding mountains Alvelos, Açor, Estrela and Moradal.

4.9. Conheiras Trail (10,6 km)

Geological interest points: gold mines, quartzite ridges, fluvial terraces, deep-incised Ocreza valley. Along this trail you can discover the history of Ocreza River incision while you walk among the Roman remains of gold exploitation.

5. Conclusions

The growth of pedestrian trails is creating a strong trend inside nature tourism market. In Naturtejo Geopark there is a regular schedule of pedestrian trails involving groups from 40 to 650 participants coming from the territory but also from abroad. These trail parties involve local community and usual have local guides/story tellers apart from Geopark guides. There are regular participants that make more than 300 km to come to such events which join the sport with cultural and natural approaches. There are also specific groups coming from Spain (e.g. Madrid) by specialized tour operator partners to be amazed by, at least some of the Naturtejo Geopark's 439 km trails going into the most remote and fascinating spots of this special place of Earth.



NEW CHALLENGES WITH GEOTOURISM

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