



# CRUZIANA

GEOPARK NATURTEJO DA MESETA MERIDIONAL-EUROPEAN AND GLOBAL GEOPARK - MONTHLY REPORT

**In this issue:** – Naturtejo/Bodoquena-Pantanal geoparks partnership at the III Encuentro Latinoamericano de Geoparques – Geoparks and Geosites teaching module developed by Naturtejo Geopark under the frame of the EU project GEOSCHOOLS – New Geopark educational programmes 2013/2014 – Save the Earth awarded the Most Sustainable Festival...and more!



Olá/Hola/Ciao/Bonjour/Γειά σου/Hallo/God Dag/Salut/Zdravo/Hello/Ahoj/Helo/Helló/ Hei/  
Dia duit/Bok/Kaixo/Pozdravljeni/Czesc/Halló/Merhaba

## **Geo-stories of our places and people: Ladoeiro**

Ladoeiro is a singular village located in the main road of a wide area of almost perfect plateau – the “Campanhas da Idanha”. Lowered 150m in respect to the Castelo Branco Platform due to recent tectonic vertical movements related to the Ponsul Fault bordering to the west as a major step in the landscape that we need to go downstairs to reach the Border, the Idanha peneplain 200-250 m high, ages more than 50 million years old and has passed by several stages of applanation. From these two geological processes results on of the most interesting features of the Ladoeiro landscape: the enormous difference between the wide, ancient and regular applanation and the amazing scar that crosses the region with rejuvenated vitality in the scarp of a remaining active fault. Being part of a large sedimentary basin located between Vila Velha de Ródão and Moraleja already in Spain, resulting from the uplift of the Central Iberian Mountain Belt, the sedimentary rocks prevailing in Ladoeiro are sandstones rich in feldspar minerals and clays coming from the erosion of surrounding granite plutons. From this fine detrital composition of the substrate that favors superficial accumulation of waters, generating swampy lands, may have come the name Ladoeiro, evolving from “lodeiro” (mud land), as well the names Barreiros (clay land) and Lameiro (also mud land). Also because of this geological reason the traditional house is made of adobe parched under the summer sun, superimposed or prolonging the rude stones made of carbonate sandstone only scarcely cropping out in the area as pedogenic-related lens. “In full Tertiary flat, land of sand and clay, without stone to build, the resident resort to the adobe dried under the fervent sun of summer”, describes Orlando Ribeiro in 1944, a rare heritage almost disappeared from the village by the greediness of concrete and brick. The carbonate rocks constituting “cuestas”, such as, for example, the Lomba geosite, are important and uncommon testimonies of the Water Cycle in the past, with an origin in hotter and drier climate periods than the present.

The difficulty of superficial drainage together with the almost perfect applanation is responsible for the existence of many streams with flat, divergent and linear valleys, with frequent floods during winter. At north of, between Couto da Várzea and Jardas, and just after Rosa Cometa, Ponsul River runs without valley, a reminiscence of a large period of time in the past when this river freely wandered by the Campanhas da Idanha. Towards south, the highs are regularly kept around 250 m gently decreasing towards west, under the influence of Ponsul River, after Rochão and for 8 km showing the valley controlled by the fault zone and consequently more prone to erosion. In more recent times there was the capture of the free section of Ponsul River, by the tectonic movement of Ponsul Fault, which is represented by Munheca gorge. For this reason, Povo and Caldelas streams run towards northwest, in contradiction to the main drainage going in direction to Tejo River.



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The geomorphological features of generalized flatness, together with the resulting soils and the abundance of water favor some of the most productive cropping practices in the whole territory. Covering an area of 63,11km<sup>2</sup> where 1290 people live, the agriculture and manufacturing sector is vibrant due to the sustainable use of water coming from Marechal Carmona reservoir, built in 1949, through the Association of Irrigators, with particular emphasis for the production of watermelon, capsicum and melon. With the support of the municipality of Idanha-a-Nova, new projects emerged to reinforce the dynamics of the sector: the society Hortas d'Idanha horticultures central and the press Coopagrol, from the association of olive oil producers from Ladoeiro, taking advantage of an old tomato factory in perfect state of conservation with given proofs for industrial tourism; the Agrifood Logistics Centre of Ladoeiro; the Watermelon Festival, one of the main socioeconomically events in the whole region. About 50 family-based agribusiness are established at Ladoeiro. More recently, and born from the spirit of innovation and sustainability, it is worth to mention Real Idanha and Ervas de Zoé, for best practices in biological agriculture, and Quinta do Capilé, artisanal cheese making. At a handcrafting level, it clearly stands up in the region the Project Quinta dos Trevos, by the work with linen in handloom, as well as the carpentry and blacksmith work that bring national recognition. Recognizing that the development of the tourism sector in Ladoeiro must recognize the countryside, Quinta dos Trevos was converted in to a guest house dedicated towards learning of handcrafting arts and experiencing the countryside. From the same inspiration came the reconversion of Idanha Natura Hotel, despite reminding the nationally recognized importance of hunting that was the original reason to build the hotel. More room is available for the development of the tourism sector in countryside environment if it is possible to use the paths of the Water Cycle in to a short pedestrian trail using channels and other equipments aged of many decades; if there is the rehabilitation of the technique of building with adobe, providing value to the remaining popular architecture and fostering the building of new tourism equipments; if enhances at least some of the existing historical heritage that may bring the visitor to walk in the village, such as the seventeen century Mother Church, with the baroque golden altars, together with the converging streets still showing traditional houses, the Great Fountain aged from 1571 and the bucolic Sinks Fountain accessible in a nice ride by the vicinities of the village, using a bike or a horse.

Recommended Bibliography:

DIAS, R.P. & CABRAL, J. (1989) – Neogene and Quaternary reactivations of the Ponsul fault in Portugal. *Comunicações dos Serviços Geológicos de Portugal*, 75: 3-28.  
PIRES NUNES, A. (2001) – O Património cultural dos concelhos de Castelo Branco e Idanha-a-Nova. *Geonovas*, 15: 133-145.



**Olá/Hola/Ciao/Bonjour/Γειά σου/Hallo/God Dag/Salut/Zdravo/Hello/Ahoj/Helo/Helló/ Hei/  
Dia duit/Bok/Kaixo/Pozdravljeni/Czesc/Halló/Merhaba**

RIBEIRO, O. (1943) – Evolução da falha do Ponsul. Comunicações dos Serviços Geológicos de Portugal, XXIV:109-123.  
[www.ladoeiro.blogspot.com](http://www.ladoeiro.blogspot.com)

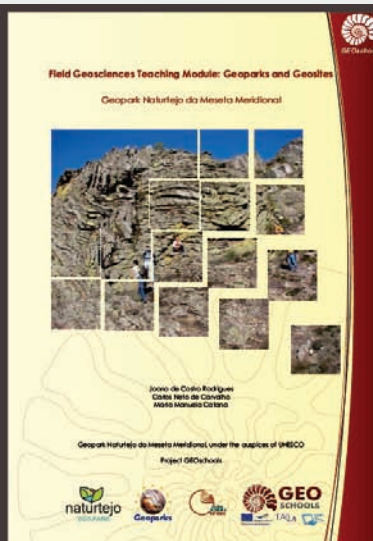
The Editor  
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Front page: (Objectiva: Geopark Project, [www.naturtejo.com/objectiva](http://www.naturtejo.com/objectiva))

# ACTIVITIES OF THE MONTH



**25 October – Save the Earth Ecofestival awarded the Most Sustainable.** The first edition of the Portugal Awards awarded the Ecofestival organized by Quercus environmental association in the village of Salvaterra do Extremo. Save the Earth was considered the best small festival in Portugal and it is part of the Landscape Festival – European Geoparks Week organized by Naturtejo Global Geopark.



**November – Geoparks and Geosites teaching module developed by Naturtejo Geopark under the frame of the EU project GEOSCHOOLS.** Getting young people excited about Geosciences starts with education in its best and most effective ways. The GEOschools EU project opens new ways of teaching geosciences by developing a framework on geosciences literacy principles, at least, for the participating countries. Naturtejo Global Geopark is the Portuguese representative in this project. According to Wolfgang Eder, chairman of “Earth Science Matters” Foundation and external evaluator of the GEOschools, this project focusing on themes such as bridging the gap between scientific knowledge and school knowledge in geosciences, increasing the knowledge of teachers and improving the ability of students in valuing and appreciating geosciences, reinforcing educational skills of geosciences in European school environment, providing a consortium on research and initiatives on geo-scientific didactics and triggering school education for sustainability, is a smart approach. Among several deliverables developed under GEOschools a series of Teaching Modules were produced and tested by teachers and can be adapted, under the provided subjects, to different realities all over Europe. Naturtejo Geopark was responsible to develop the Teaching Module in the field for Geoparks and Geosites. The e-book coordinated by Joana Rodrigues was developed based on the comprehension of the secondary school curricula adapted to the reality of Naturtejo Geopark and selected Geosites. Thus, the Teaching Module is an extension of the classroom in to the field that can be adopted in many geoscientific environments. The provided geo-itinerary in the Geopark was previously tested in July with 26 teachers coming from all over Portugal and based in their conclusions and suggestions. The Teaching Module also emphasizes the results from student and teacher interests questionnaires that were developed earlier in Portugal under the frame of GEOschools, concerning most interesting geoscientific subjects and the use of technology in the field. The e-book Field Geosciences Teaching Module: Geoparks and Geosites is already available in the GEOschools official website at [www.geoschools.geol.uoa.gr](http://www.geoschools.geol.uoa.gr). Together, 7 powerpoint presentations on Naturtejo Geopark's geosites can be downloaded to prepare the fieldwork in the Classroom.



**1 to 3 November – Land of Templars for Spanish tourists.** The Spanish tour operator ARAWAK was responsible for a group of 52 tourists that came to explore the history of the Templars in the Geopark. The company Actigeo guided the group in the historical village of Monsanto, the city of Castelo Branco with the Palace's Garden, the city and Cargaleiro museums, the boat trip to Portas de Ródão Natural Monument with Tejo River as the boundary between Portugal and the Moorish kingdom defended by the Templars and the Ichnological Park of Penha Garcia with the last castle in the region to be built by the Templars.

**9-10 November – Pack Naturtejo Geopark for a Spanish tour operator.** The operator ADENEX brought a group of 25 tourists to visit the Geopark. The Incentivos Outdoor Company guided them to Nisa to visit museums and have an experience with clay. They also went for the boat trip to Portas de Ródão Natural Monument and the rock art interpretative centre in Vila Velha de Ródão. They concluded the visit with a guided tour in Castelo Branco.



**9-10 November – Festival of Wines and Liquors of S. Miguel de Acha.** In its fourth edition the Festival of Wines and Liquors attracted thousands of people to the village of S. Miguel d'Acha. Full of animation and activities, this festival is a place for opportunities according to Armindo Jacinto, chairman of the Geopark and Mayor of Idanha-a-Nova. During two days “the best regional products were promoted and local economy was fostered”. Local production of wines and liquors is a family tradition that it is worth to support, motivating business.

Celebration of wine is especially well-timed in São Miguel de Acha, where the prized Súbito brand comes from. Viniregra has been one of the main ambassadors all over the country. During the festival there was live cooking with the famous Chef António Sequeira, from the College of Hotelry and Tourism of Estoril, a guided taste of “seventre” made by the Seventre brotherhood of São Miguel de Acha, good gastronomy, music and pedestrian trails. Also worth to mention is the traditional roasted chestnuts, the Fado night and the contest of wines and liquors coordinated by the College of Management from Idanha-a-Nova.

**10 November – Tour by Proença-a-Nova.** QUELUZTUR organized a group of 19 tourists to visit the schist village of Figueira and Portas de Almourão geomonument.



**14 November – Educational Program in the Fossils Trail of Penha Garcia.** 29 students and 3 teachers from the school Capitão Santiago de Carvalho, Alpedrinha, came to the Ichnological Park of Penha Garcia for the traditional educational programme organized by Manuela Catana and Hugo Oliveira.



**15 November – Naturtejo Geopark in the Scouts Annual Meeting from Mato Grosso do Sul (Brazil).** Naturtejo Geopark participated in the Scouts Annual Meeting from Mato Grosso do Sul, under the partnership with the Bodoquena-Pantanal Geopark project. Several activities were run in the Park of Indian Nations, at the city of Campo Grande, where the Geopark Reference Centre is located. This year's subject was Water and the scouts developed several activities, including the talk given by Joana Rodrigues on "Geoparks and Water" about the importance of water in the geodiversity of Naturtejo and Bodoquena-Pantanal geopark's landscapes.





**15-17 November – Iberian Open Sheepdog Championship.** The best sheep dogs in the Iberian Peninsula competed in Idanha-a-Nova, in the first Championship organized at Monte das Areias, Zebreira. In competition were 19 dogs and guides coming from Portugal, Spain and France. The best Spanish and Portuguese groups were selected to represent their countries in the next Sheepdog World Championship to be held in Scotland. The first Iberian championship was organized by the Portuguese Association of shepherd dog users and the Spanish association of working Border Collie, with the support of Idanha-a-Nova municipality.



**18 November to 10 December – Chilean student works in the Geopark.** José Miguel Benado Wilson defended his Master thesis in Geological Heritage and Geoconservation at the University of Minho about the geological heritage of the Geopark Project Cajón del Maipo, Chile. Just afterwards he came for a short probation on Educational Programmes at Naturtejo Geopark oriented by Manuela Catana. During the probation period José followed, inspected and supported the work in progress, and contributed to the development of some educational resources. Moreover, he translated the contents of the Educational Programmes ([www.geonaturescola.com](http://www.geonaturescola.com)) into Spanish and also got the opportunity to visit some geosites, museums and interpretative centres of Naturtejo Geopark territory he didn't know after his first short visit with in the Master Course last summer.



**24 November – Discovering the world of mushrooms.** More than 150 people participated in the thematic visit “Earth Scents”, organized by the municipality of Idanha-a-Nova. This was the fourth and most participated edition of the mycological visit in Vale Feitoso, at Penha Garcia. Using wicker baskets, sharp sticks and small knives, participants coming from all over the country and Spain walked by the forest learning about mushroom species. They found a source of wealth that is important to know for valuing as opportunity for development and job creation. The visit had the technical support of José Gravito Henriques, an expert in mycology from the Regional Board of Agriculture and Fishing. He evidenced the characteristics of the mushrooms found along the path, and explained their gastronomic and commercial potentialities, the adoption of good practices in collecting and the danger to avoid toxic species. The visit included a lunch made with mushrooms in the Ô Hotel Astoria, at Termas de Monfortinho. The menu prepared by the renowned Chef Mário Ramos, was composed by cappuccino of wild mushrooms with Idanha's old cheese foam, boletus risotto and wild rabbit in the iron pot and beirã pudding with sanchas mushroom and strawberry tree fruits jelly.



**25 November – New Naturtejo Geopark educational programmes for 2013/14.** The novelties in the Educational Programmes of Naturtejo Geopark for the school year of 2013/2014 are the Field Trip “Bio and Geodiversity in the Fluvial Canyon of the Erges (in the village of Segura)” and the Workshop – “Naturtejo Geopark and Geotourism”. Other events such as the II Edition of the School Contest called “The Water that Unites Us”, under the subtopic “Desertification” addressed to students from the schools belonging to the Naturtejo territory along with a workshop for teachers called “Information in Context” and organised in cooperation with the Portuguese National Commission for UNESCO, the Portuguese National Committee for International Geosciences Programme (IGCP-UNESCO) and the Portuguese Forum of Geoparks will also occur. Any information on the Educational Programmes can be accessed in [www.geonaturescola.com](http://www.geonaturescola.com).



**25-27 November – Naturtejo/Bodoquena-Pantanal geoparks partnership at the I Simpósio Argentino de Patrimônio Geológico, Geoparques y Geoturismo y III Encuentro Latinoamericano de Geoparques**

**25-27 November – Naturtejo/Bodoquena-Pantanal geoparks partnership at the I Simpósio Argentino de Patrimonio Geológico, Geoparques y Geoturismo y III Encuentro Latinoamericano de Geoparques.**

The partnership between Naturtejo Global Geopark and Bodoquena-Pantanal Geopark Project is moving fast in South America. Carlos Neto de Carvalho had the opportunity for a one-month working mission to the Bodoquena-Pantanal State Geopark which together with the local teams directed by Afrânio Soares, developed daily work, several working meetings and field work. It is worth to remind that Joana Rodrigues from Naturtejo Geopark is working for one year together with Bodoquena-Pantanal Geopark with the aim of foster communication and know-how transfer among geoparks, in particular how a Global Geopark works. This time Afrânio Soares together with Carlos Neto de Carvalho and Joana Rodrigues connected by car Pantanal in Mato Grosso do Sul State with Lanin National Park at Patagonia, Argentina, to participate in a more sustainable way, contributing for local economies all the way long, in the first Argentinean Symposium on Geological Heritage, Geoparks and Geotourism. The Symposium held in San Martín de los Andes was also the III Latin-American Meeting organized by the Geological Survey of Argentina, the University of Comahue, the Ministry of Tourism and the UNESCO Science Regional Office for Latin America and the Caribbean. So many misconceptions in particularly on Geoparks and Geotourism are typical of such pioneering conferences and the organization of a post-conference workshop by Global Geoparks Network representatives for geopark projects running in Latin America was extremely needed to contribute for more clarification. Also an informal meeting of Latin American geological heritage experts was important to define a closer collaboration among researchers and institutions from this continent. In all working activities Bodoquena-Pantanal Geopark project was present actively participating in the discussions and learning from the results. A presentation of the Bodoquena-Pantanal was made and divulgative material was distributed. For Naturtejo Global Geopark, Carlos Neto de Carvalho and Joana Rodrigues presented in the Symposium an overview on the tourism project of the geopark and the existing geocultural heritage, value and use.



**28 to 29 November – Brazilian researcher in a short visit to the Geopark.** Rodrigo Fontana, geologist, is a master student from the Institute of Geosciences of the Federal University of Rio Grande do Sul, Brazil. He came to Portugal and Spain to study the geoparks of both countries, mainly the approaches to interpret geological heritage to the public, and with the particular interest in the provided educational resources. Presently he is developing a Project on geological itineraries at Porto Alegre, with methodological contributions for geological divulgation. At Naturtejo Global Geopark he was welcomed by Manuela Catana and Hugo Oliveira which have showed him the work we are developing in the geomonuments, namely in the Erges fluvial gorges with a visit to the Interpretative Centre Lands Idanha at Segura, the Ichnological Park of Penha Garcia and the Inselberg of Monsanto. On the second day they met at the headquarters of Naturtejo Geopark, the Raiano Cultural Centre, where Rodrigo Fontana collected didactical tools, tourism promotional material and talked about geoconservation, geotourism and in particular geoeducation implemented in Naturtejo Geopark.

# IMPACT OF GEOPARK IN MEDIA



## Newspapers & www

30 October (Gazeta do Interior) – Save the Earth awarded the Most Sustainable Festival

31 October (Reconquista front page) – Festival wins national award

31 October (Reconquista) – Citizens for Tejo

31 October (Reconquista) – Landmania joins 100 jeeps in Oleiros

31 October (Reconquista) – Wines and liquors at São Miguel d'Acha

November (Oleiros Magazine) – Appalaches with trails at Oleiros

November (Oleiros Magazine) – Geopark on wheels

November (Raiano) – Bread was “king” in Casqueiro broadcasted to the world

6 November (Gazeta do Interior front page) – São Miguel d'Acha hosts the Festival of Wines and Liquors

6 November (Gazeta do Interior) – Holistic International Meeting with positive results

6 November (Gazeta do Interior) – Scenography meetings with large participation

6 November (Gazeta do Interior) – Meeting of Land Rovers

7 November (Reconquista) – Wines and liquors anticipate large animation

7 November (Reconquista) – Luis Correia presides to the Tourism of Center

14 November (Reconquista) – Walk by the mushroom trails

14 November (Reconquista) – Festival welcomes thousands in São Miguel d'Acha

20 November (Gazeta do Interior) – Penha Garcia hosts walk to discover mushrooms

21 November (Reconquista) – Penamacor asks for taking part in Naturtejo

28 November (Reconquista) – Water and Desertification – Naturtejo launches school contest



# SCIENTIFIC CONTRIBUTIONS FOR THE GEOPARK AND THE GEOSCIENCES



Rodrigues, J.C., Neto de Carvalho, C. & Catana, M.M. – Field Geosciences Teaching Module: Geoparks and Geosites. GEOschools Teaching Module Series, Geopark Naturtejo da Meseta Meridional, Castelo Branco, 67pp.

Neto de Carvalho, C. & Rodrigues, J.C. – Geopark Naturtejo, bajo los auspicios de la UNESCO – La construcción participativa de un destino geoturístico en Portugal. Actas del I Simpósio Argentino de Patrimonio Geológico, Geoparques y Geoturismo y III Encuentro Latinoamericano de Geoparques, 25-27 Noviembre, San Martín de los Andes, Neuquén-Argentina, 2pp.

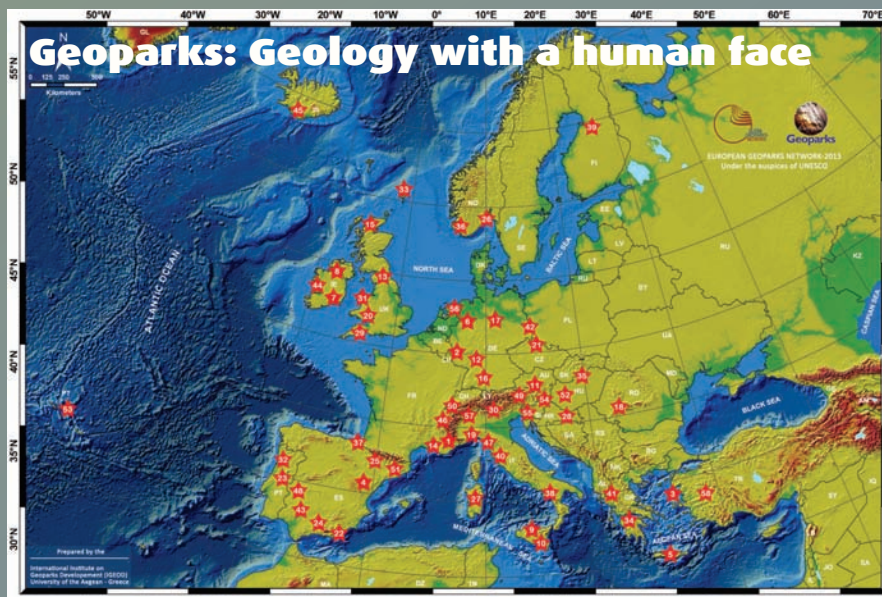
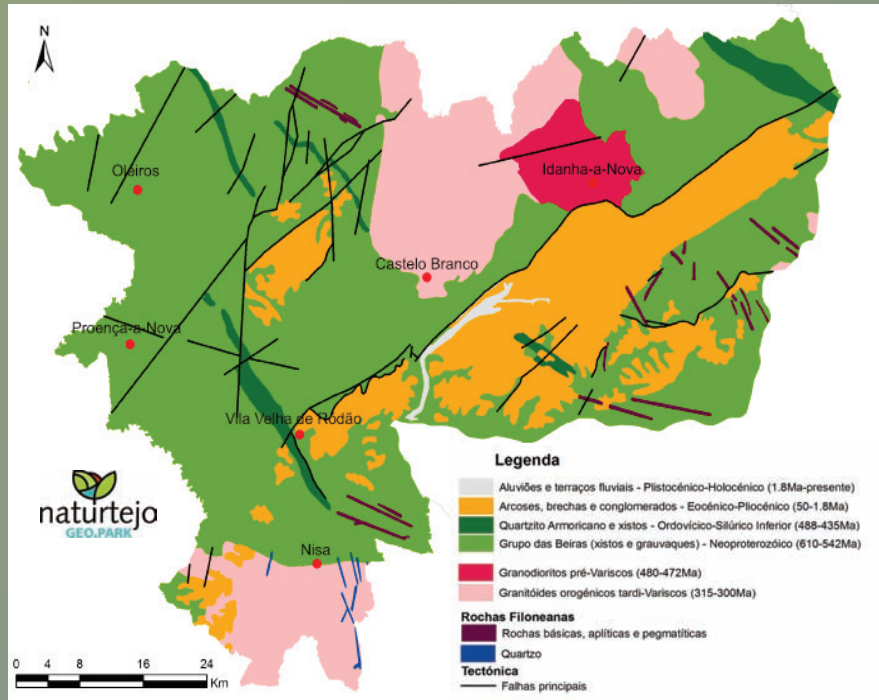
Neto de Carvalho, C., Rodrigues, J.C. & Chambino, E. – Património geocultural do Geopark Naturtejo da Meseta Meridional (Portugal). I Simpósio Argentino de Patrimonio Geológico, Geoparques y Geoturismo y III Encuentro Latinoamericano de Geoparques, 25-27 Noviembre, San Martín de los Andes, Neuquén-Argentina, 2pp.



## PROMOTION FOR THE GENERAL PUBLIC

Booklet GEONATURescola – Programas Educativos do Geopark Naturtejo 2013-2014, 29pp. (in Portuguese and Spanish)





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[www.geoparknaturtejo.com](http://www.geoparknaturtejo.com)