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Boas Festas  
Merry Christmas  
Feliz Navidad

76

Alcains, terra de granitos e canteiros...

# CRUZIANA

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

**In this issue:** - International scientific work puts Penha Garcia and Portugal in the history of Ichnology – “Out of Place” Festival – “The time we went for ore” in Medelim – Granite crib in Alcains: 6 tons of wishes for 2013... and more!



**Olá/Hola/Ciao/Bonjour/Γειά σου/Hallo/God Dag/Salut/Zdravo/Hello/Ahoj/Helo/Helló/ Hei**

This year bids farewell with four major publications where the Naturtejo Geopark is, somewhat, involved. The four publications focused on three fundamental issues for any Geopark: Investigation in geosciences, geoconservation and education. The famous scientific book publisher Elsevier releases a new book of the series “Developments in Sedimentology” entitled “Trace Fossils as Indicators of Sedimentary Environments”. This compendium dedicated to the study and application of the ichnofossils to the sedimentary record analysis, edited by Dirk Knaust and Richard Bromley, gathers in almost 1000 pages a selected group of international researchers who make an analytic review of the major environment depositional environments contributions of ichnology and its use in biostratigraphy and sequence stratigraphy. One of the significant parts of this international reference work addresses the characterization of aquifers and the hydrocarbon reservoirs. Another part concerns the ichnology history itself as science. The investigators Andrea Baucon and Carlos Neto de Carvalho had the idea of presenting the history of ichnology from a regional approach, gathering for this around 20 investigators covering all continents. This approach has never been made before, since this type of synthesis work has been referred to the classic Britain, German and North American schools. But the approach was further, and touched the establishment of schools who today thrive in other regions, as South America or China. In this way, since the times of Leonardo da Vinci to the contemporary period, it has been demonstrated that the history of ichnology has a pandemic construction which is the basic challenge of this Paleontological discipline nowadays. As it could not be, the Portuguese contribution to the Ichnology is finally demonstrated, as well as the geo-cultural dimension of the Ichnological Park of Penha Garcia.

ProGEO, The European Association for the Patrimony Conservation, published the book “Geoheritage in Europe and its conservation”, a deep reflection, nation to nation of the Geoconservation state in Europe, its use and valuation. The cover page is a true beauty, presenting one of the most beautiful stratigraphic unconformities, located at Ponta do Telheiro (Vila do Bispo), when seen from the sea. Having as editors W. Wimbledon, at the time president of ProGEO and Smith-Meyer, a selected group of specialists analyse 37 countries in Europe, mostly identifying the role or the potential of the geoparks for the diffusion of the geological heritage and its use in tourism and education. For Portugal, José Brilha is the responsible for the “state of the art”, where the Portuguese geoparks assert themselves. Sadly, Wimbledon has a very conservationist approach in his introduction of the geological heritage and in the extremely useful definitions which he presents. Concerning the definition of Geopark, he underlines a detachment, even mistrust in relation to the geoparks reducing them to “touristic promotion purposes”, having as one of the major objectives “the hope in the socio-economic wealth through popularization”.



**Olá/Hola/Ciao/Bonjour/Γειά σου/Hallo/God Dag/Salut/Zdravo/Hello/Ahoj/Helo/Helló/ Hei**

José Brilha and Paulo Pereira coordinate the reprint of the book “Geological Heritage – Geosites to visit in Portugal”, now edited by the well known school textbooks editor “Porto Editora”. In this bilingual book there is a selection of the most general public appealing geosites, in a range of more than 300 geosites of scientific importance which include the national geological heritage inventory, constituted from a project that brought together dozens of Portuguese geoscientists, among them Naturtejo Geopark members. From among the 11 Geopark geosites listed in this inventory are included in the literary work the Inselberg of Monsanto, the “Portas de Ródão” and the Ichnofossils of Penha Garcia.

Finally, the last issue of the international magazine “Episodes”, of the highly reputed International Union for Geological Sciences, contains an article by Maria Helena Henriques and collaborators about the Arouca Geopark as a case study of educational resource, lightly concerning the Portuguese geoparks. This study about the student perception regarding the Geological Heritage and geoparks was made in a school located at Ponte de Sor by a secondary school teacher based on study visits made by two classes, totalling a sample of 37 students. The results are predictable and show that the field trips are essential tools on the Earth-sciences teaching, being the geoparks considerably prepared areas with multiple educational tools available to schools that meet the interests of the students. In fact, this is one of the subjects included in the European investigation project GEOschools 2011-2013, in which Naturtejo Geopark is partner, involving the participation of 20 teachers in Portugal alone, covering a range of about 2000 students in Europe.

The year of 2013 comes to us as a unique opportunity of fulfilment and change for the better. Regarding the Geologic Heritage, ends up the publication of the Geological Heritage and Mining Inventory of the Geopark Naturtejo da Meseta Meridional, as well as its distribution all over the municipalities for the integration on the Municipal Master Plan revision. The paleontological investigation work is strengthened in Penha Garcia. The route of the exhibition “The time we went for ore” is concluded, although other regional and national tours are initiated, and the underlying investigation work will be published. Concerning the conservation of the Geological Heritage, new protected areas will emerge through municipal projects. Regarding the education, we enter in the last year for the European project GEOschools with the completion of all the studies and pedagogic products. From this, there may be a new application for the 2013-2016 period. A new exhibition about the Evolution of the Forests in Portugal is been prepared with the “Forest Living Science” Centre.



**Olá/Hola/Ciao/Bonjour/Γειά σου/Hallo/God Dag/Salut/Zdravo/Hello/Ahoj/Helo/Helló/Hei**

Next year is expected to be a favourable year for the promotion, with the organization of the Geoparks stand in the Berlin International Tourism Fair, with the Ecotourism Pavilion devoted to geoparks. The participations in the Madrid and Lisbon fairs will not be neglected. Numerous local events will be organized, having as scheduled highlight the Landscape Festival. The partnerships with the Mining Routes will provide a new week of activities dedicated to the geological sciences. In sum, a year of prosperity and animation to counteract the hard times that afflict the European region.

The editor

Carlos Neto de Carvalho  
Scientific coordinator of the Geopark Naturtejo da Meseta Meridional  
Geologist

# ACTIVITIES OF THE MONTH



*Guia Turístico de Oleiros disponível para Sistema Operativo Android*

Já se encontra disponível, no website do município de Oleiros ([www.cm-oleiros.pt](http://www.cm-oleiros.pt)), a aplicação para Sistema Operativo Android do Guia Turístico de Oleiros. Com mapas interativos associados, devidamente suportados por elementos descritivos, nela aparece georreferenciada toda a informação de relevo ligada a bens patrimoniais naturais, monumentos edificados, percursos pedestres, freguesias (e seus pontos de interesse), gastronomia, hotelaria e restauração, assim como contactos úteis. Para descarregar a aplicação, os utilizadores têm à sua disposição o QR Code que aqui se apresenta.



**December – Oleiros touristic guide available for Android.** The Municipality of Oleiros developed an application for Android which gathers the best choices for tourism in this region. The application presents the Geopark Naturtejo geomonuments, as well as the existing geosites in the municipality. It should be noticed that this guide basis for Android was the “Oleiros Mountains Route” developed by de Municipality of Oleiros together with the Geopark Naturtejo.



**December – 6 tons crib in the centre of Alcains.** The land of the granite and the garden beds hosted a very original idea: a crib with the principal figures made by a single bloc of granite, symbolizing the union with a total weight of 6 tons! This Crib was exposed in the “Largo de Santo António”, at the very centre of the town of Alcains, as a result of an initiative towards the community of two local companies, the “Fonseca & Dias”, of Castelo Branco, an the “Leitaria do Largo”, of Alcains. “We wanted to create something with the region raw material, as is the granite”, referred Jorge Silva to the newspaper “Reconquista”, producer of the famous Alcains cheese and owner of the traditional store “Leitaria do Largo”.

“The idea was to stir the least possible: with a hammer, a chisel and, essentially, good will” said Gonçalo Dias, of the Fonseca & Dias company in the granite industry for almost 50 years. This crib “represents the best that we have in Alcains: the men and the women with the creativity and the will”, stressed the councillor Cristina Granada to the referred newspaper.



**1 to 15 December – “Out of Place”: good music in unique environments.** “Out of Place” – International Festival of Classic Music took place in some unusual places in the region of Idanha-a-Nova, with a very positive repercussion. The old visigothic Cathedral of Idanha-a-Velha was the start of a set of concerts featuring Portuguese and French groups which included the “Adufeiras de Monsanto” performances. The exhibit “Agriculture In the Idanha Fields” in the “Raiano” Cultural Centre, headquarters of the Geopark Naturtejo, was the stage of the “Iberian Christmas, the Sacred and Popular Devotion”. The hermitage of S. Pedro de Vir-a-Corça, located in the hearth of “Boulders of Monsanto”, open its doors to the magnificent voices of the “Sete Lágrimas”. Dance Workshops and the renowned specialist in music history Rui Vieira Nery conference occurred in Idanha-a-Nova and Ladoeiro. In this last village took place an excellent violin and concertina performance in an old tomato factory. In Medelim, in a private olive oil press, was heard cello and it was officially opened the exhibit “Quando a Gente andava ao Menério” in the “House of the Balconies”. Also in the “Olive oil presses of Proença-a-Velha” Museum the “Rustic Concert” brought “through the court and streets”. An excellent initiative by the “Raiano” Cultural Centre that animated the cold afternoon and winter nights, in beautiful nooks, that were a true admiration by those who have discovered it.



**6 to 9 December – Geopark Naturtejo in the XXVI “International Fair of Minerals, Gems, and Fossils of Lisbon”**

**6 to 9 December – Geopark Naturtejo in the XXVI “International Fair of Minerals, Gems, and Fossils of Lisbon”.** Under the theme “Minerals of the Seabed” this year took place the 26th International Fair of Minerals, Gems and Fossils, in the National Museum of Natural History and Science, in Lisbon. This fair, an essential reference to the geoconservation actions developed in Portugal in the 90's by Galopim de Carvalho, includes in his program scientific conferences, laboratories and exhibits. The Geopark Naturtejo was invited to address for an exhibit of geoproducts which occurred with local entities support. Thus, was present the “Living Science Forest” centre who made a hands-on presentation about the confection of his “Paleo-soaps”, the company Layer of design and printing, with t-shirts alluded to the Geopark Naturtejo and Paulo Dias, promoting his crafting art of silver trilobite-shaped art pieces. This was a promotional presence which had a significant importance for the Geopark Naturtejo, as it narrows the cooperation relationships between this entity and the National Museum of Natural History and Science, going as far as the Geopark project origins and, in a foreseeable future, will be formalized in the scope of the partnerships between associates of the Mining Routes.

**6 to 9 December – Spanish Tourists trough the central area of Portugal.** The Naturtejo organized once more a touristic package in the central lands of Portugal for a 27 person group of the Spanish operator “Tierra Fuego”. The company “Incentivos Outdoor” was responsible for providing the best tour guide trough the local cities: Guarda and its Cathedral, Coimbra and the roman city of Conímbriga, Aveiro, the estuary and the romantic Buçaco, Viseu and the Grão Vasco Museum.



**9 December to 6 January– “The time we went for ore” in Medelim.** The nomad exhibit dedicated to the memory revival of the “Mining” times continues his journey after one and a half year of existence. This time around, spent the Christmas in the beautiful village of Medelim, where the background linked to the tin prospection is still in the memory of so many people. In addition to the exhibit opened to the public in the “House of the Balconies” a filmic document was produced collecting all of the precious experiences which involved “all of the village people”. In parallel to this, was presented a suggestion, a “Living Itinerary through the Mining Memories of Medelim”, with a strong community involvement. The presentation led by Carlos Neto de Carvalho and Eddy Chambino took his listeners, who rushed in great numbers, through two crucial moments: the phosphate fever in the 80's of the XIX century and the Second World War period and the beginning of the Cold War. The exhibit took part in the “Out of Place” Festival of Early Music, meaning that, afterwards, there was cello concert for all in the Lopes Cardoso House.

**15 to 18 December – 29th “Judoneve” Competition Internship 2012.** In Termas de Monfortinho, at the Astória Hotel, took place the 29th “Judoneve” Competition Internship 2012, realization that became over the years (it began in the year of 1983, in Serra da Estrela) one of the main events hosted by the District Association of Judo, of Castelo Branco.

The event was attended by over seventy judo fighters of the following clubs: Judo Academy of Castelo Branco, Voluntary Fire Brigade of Idanha-a-Nova, Externato Cap. Santiago de Carvalho of Alpedrinha, Vitória de Santo António da Covilhã, Lusófona University, Modern College, Bom Sucesso College, and Champagnat College.

This year edition's main objective was to develop the competitive component without leaving aside the physic and technic parts. There was also the preoccupation of the teambuilding improving, the behaviour rules and new friendships. In a word: having healthy and sporting holidays.

There was two daily Judo training sessions, riverside walking, jogging, tennis, futsal, BTT, gaming room, gym, pool, outdoor activities promoted by the “Raia Aventura” Club such as, blowpipe and slack line. In the end, it took place a little closure ceremony and the diploma delivery.

The installations and surrounding areas presents excellent conditions regarding the comfort, security, hygiene, equipment...

The Idanha-a-Nova Council, Naturtejo and the Parish Council of Monfortinho support was essential to the success of this 29th internship. Mr. Eng. Armindo Jacinto, Vice-President of the Idanha-a-Nova Council, greeted the Judo fighters and wished them a pleasant stay in the region. He also expressed the Council intents of carrying further the support to this sport which as strong roots in this region, hopping that the 30th edition of the “Judoneve” will be held once again in Termas de Monfortinho. The Technical director of the internship Jorge Fernandes, and the responsible for the training António Moraes (6º Dan), with the support of the remaining coaches, particularly José Melo, Nuno Rosa, Nuno Mateus, Mário Rosa, Diogo Godinho and Miguel Galhardas. The medical support was in charge of Ana Damas.

This internship, organized by the District Association of Judo, of Castelo Branco, was the last event of the year finishing it with a flourish. We hope that 2013 will be even better!



**27 December – GeoChallenge in the Ichnological Park of Penha Garcia.** The year bids farewell with the beginning of the Educational Programs created by Geopark Naturtejo. 15 students of different ages of the municipality of Vila Velha de Ródão came to participate in the GeoChallenge through the Alto Tejo Studies Association, which organized the tour. Joana Rodrigues organized the group in several teams who covered the Fossils Trail searching the answers for the GeoChallenge quiz. The group lunch took place between the mythical granitic boulders of S. Pedro de Vir-a-Corça and they still had the chance to know a piece of Monsanto history.



# IMPACT OF GEOPARK IN MEDIA

## Nespapers & www

December (Raiano) – Geoparks and Entrepreneurs Encounter

4 December (Povo da Beira) – Oleiros already a touristic destination

6 December (Raiano) – Geoparks and Entrepreneurs Encounter

16 December ([newsletter.roteirodeminas@dgeg.pt](mailto:newsletter.roteirodeminas@dgeg.pt)) – “Out of Place” Festival – Exhibit “Quando a Gente Andava ao Menério”

19 December (Gazeta do Interior) – Great Zêzere Route arrives to the region

29 December ([judobeirainterior.blogspot.pt](http://judobeirainterior.blogspot.pt)) – “Judoneve” Winter internship 2012

## TV & Radio

19 to 26 December (A Bola TV – Trips on my motorbike) – Touristic visit trough Geopark Naturtejo

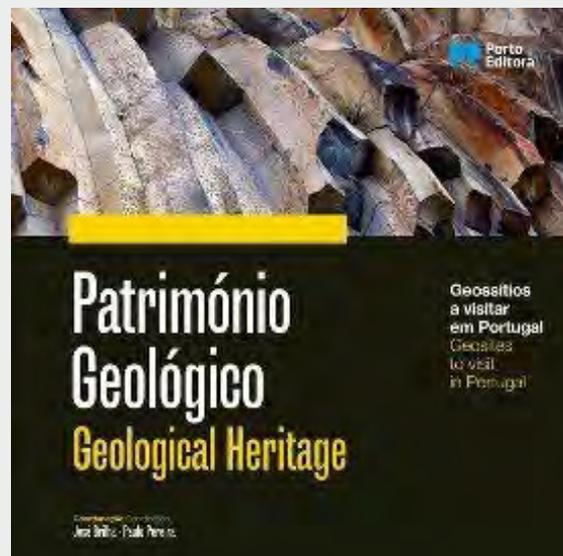
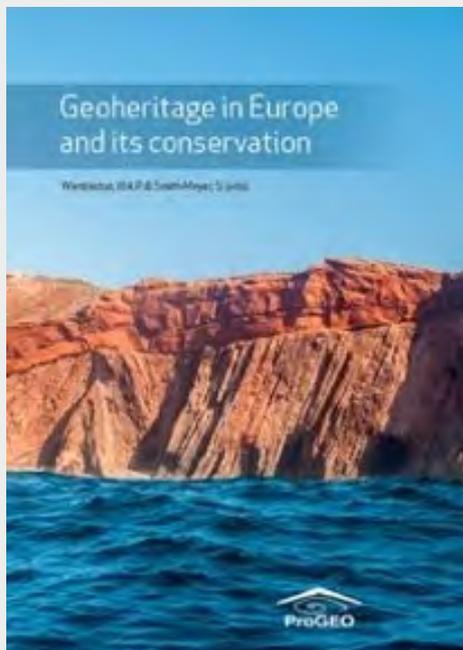
# SCIENTIFIC CONTRIBUTIONS FOR THE GEOPARK AND THE GEOSCIENCES



- Baucon, A., Bordy, E., Brustur, T., Buatois, L.A., Cunningham, T., De, C., Duffin, C., Felletti, F., Gaillard, C., Hu, B., Hu, L., Jensen, S., Knaust, D., Lockley, M., Lowe, P., Mayor, A., Mayoral, E., Mikulas, R., Muttoni, G., Neto de Carvalho, C., Pemberton, S.G., Pollard, J., Rindsberg, A.K., Santos, A., Seike, K., Song, H., Turner, S., Uchman, A., Wang, Y., Yi-ming, G., Zhang, L. & Zhang, W.- A History of Ideas in Ichnology. In: Knaust, D. & Bromley, R. (eds.), Trace fossils as indicators of sedimentary environments. Developments in Sedimentology, 64. Elsevier, Amsterdam: 3-44.

- Brilha, J. & Pereira, P. (eds.) - Património Geológico – Geossítios a visitar em Portugal. - Porto Editora, 137 pp.

- Wimbledon, W.A.P. & Smith-Meyer, S.(eds.) – Geoheritage in Europe and its Conservation. ProGEO.







# PROMOTION FOR THE GENERAL PUBLIC

**IAMG 2013** Mathematics Planet Earth 2013

**ANNOUNCEMENT**

**15th ANNUAL CONFERENCE OF THE INTERNATIONAL ASSOCIATION FOR MATHEMATICAL GEOSCIENCES**

**Frontiers of Mathematical Geosciences: New approaches to understand the natural World**

**Madrid (Spain) 2-6 September 2013**

**Background**

Since the International Association for Mathematical Geosciences (IAMG) was founded in 1988 in Prague, its mission has been to promote international co-operation and the use of mathematics in geosciences research and in technology. The IAMG Annual Conference provides an excellent environment to show the last advances in geoinformatics and a great opportunity to make contacts and gather new ideas. Furthermore, the IAMG Madrid 2013 Conference is an event of the Mathematics of Planet Earth 2013 ([www.mpe2013.org](http://www.mpe2013.org)); another reason to be in Madrid from the 2nd to the 6th of September 2013.

**Sessions**

Advances in classical statistics relevant to the Geosciences - Frontier Geostatistics - Compositional Data Analysis Applied to Geochemistry - Data assimilation in Geosciences Machine learning in Geoscience applications - Spatiotemporal analysis: structural complexity and extreme behaviour - Parameterization of soil systems at different scales - Fractals, Chaos and Complexity in the Earth System - Remote Sensing a Changing World - Modern sensor data (and their processing) in Engineering Geology - Geographic Information Systems/Geoinformatics - Quantitative methods in Geomorphology and Land Surface Processes - Deformation modeling, Geodynamics and natural hazards - Hydrogeology: From process understanding to improved predictions - Quantitative hydrology: working across scientific disciplines and time-space scales - Quantitative Environmental Geology - Modeling of energy resources - New Developments in Oil and Gas Discovery Modeling - Open Session on Mathematics of oil Recovery - Geostatistical priors in inversion of geophysical and engineering data - Mineral and energy resources for planet Earth: evaluation, extraction and optimal management - Mathematical Petrophysics Theory and Applications - Recent advances in Quantitative Methods applied to Stratigraphy and Paleontology - Mathematical Geosciences and Planetary Geology - Mathematics of Planet Earth

**Important Dates**

January 1, 2013:	Abstract submission starts/Reduced registration fee starts
February 1, 2013:	Abstract submission ends
March 1, 2013:	Notification of abstract acceptance/Extended abstract submission starts
April 1, 2013:	Extended abstract submission ends
May 1, 2013:	Revised extended abstracts returned to authors
May 15, 2013:	Early registration ends
May 20, 2013:	Submission of final versions of extended abstracts ends
September 2-6, 2013:	IAMG Madrid 2013

**For more information visit**  
<http://www.igme.es/internet/iamg2013/>



## PROMOTION FOR THE GENERAL PUBLIC

Em homenagem aos homens e mulheres que, durante gerações, retiraram o ouro da terra e tiveram coragem de não desistir.

Património de Ródão: "Há ouro na Foz"

Boas Festas!

Associação de Estudos do Alto Tejo



trilobite.aventura  
alvará 87/2008



# PROMOTION FOR THE GENERAL PUBLIC

Bloco Pedunculado da Tapada do Bião, Nisa

# 2013

**Não esquecer:**

- 13 de Fevereiro – Aniversário da Rede Global de Geoparques (2004)
- 21 de Março – Dia da Árvore e da Floresta
- 22 de Março – Dia Mundial da Água
- 18 de Abril – Dia Internacional dos Monumentos e Sítios
- 22 de Abril – Dia Mundial da Terra/Dia Nacional do Património Geológico
- 8 de Maio – Dia do Sol
- 18 de Maio – Dia Mundial dos Museus
- 22 de Maio – Dia Internacional da Biodiversidade
- 1 de Junho – Dia Mundial da Criança
- 4 de Junho – Aniversário da Rede Europeia de Geoparques (2000)
- 5 de Junho – Dia Internacional do Ambiente
- 21 de Junho – Dia Mundial das Energias Renováveis
- 26 de Junho – Aniversário do Geopark Naturtejo (2006)
- 28 de Junho – Dia Mundial da Conservação da Natureza
- 16 de Setembro – Dia Mundial para a Preservação da Camada do Ozono
- 27 de Setembro – Dia Mundial do Turismo
- 1 de Outubro – Dia Nacional da Água
- 4 de Outubro – Dia Mundial dos Animais
- 23 de Novembro – Dia Internacional da Floresta Autóctone
- 24 de Novembro – Dia Internacional da Cultura Científica
- 11 Dezembro – Dia Internacional das Montanhas

## Janeiro

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## Outubro

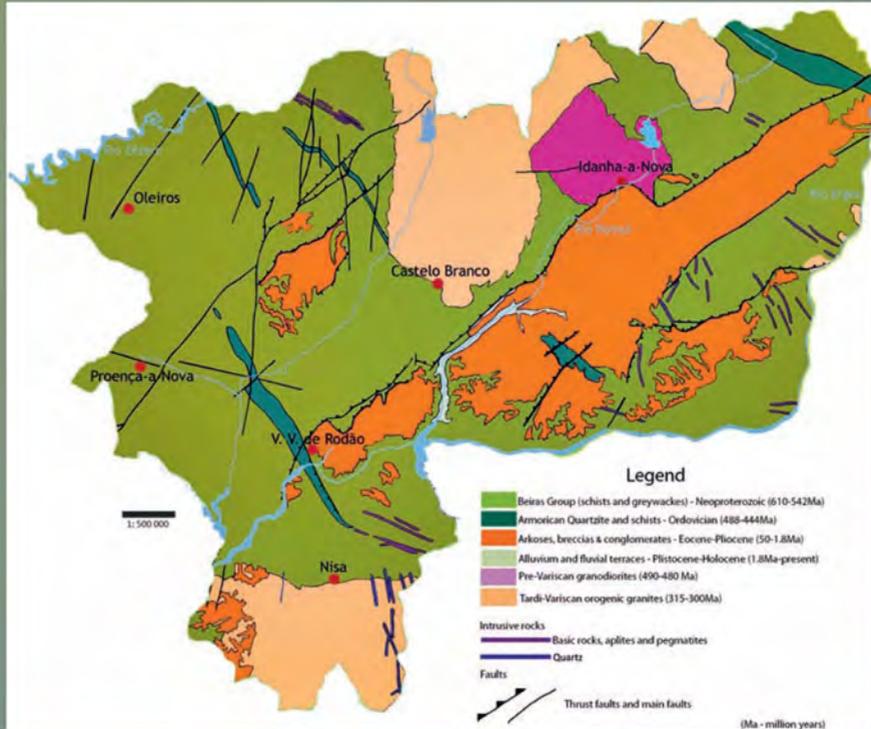
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## Geoparks: Geology with a human face



**CRUZIANA**

GEOPARK NATURAL DO ALGARVE REGIONAL EUROPEAN AND GLOBAL GEOPARK INSTITUTE REPORT

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