



### **In this issue:**

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ITB Berlin – See you in 2021!

...and more!

# **CRUZIANA**

**NATURTEJO UNESCO GLOBAL GEOPARK - E-MAGAZINE**



# MONTHLY ACTIVITIES



**Anti COVID-19 measures in the Municipalities of Naturtejo Geopark.** The SARS-CoV-2/COVID-19 pandemic, spreading worldwide with 1.2 million people infected, and forcing the confinement or even compulsory quarantine of more than a third of the world's population, has reduced the activity of UNESCO Global Geoparks and Naturtejo Geopark, in particular, during the first half of the year. The initial measures of closing schools and promoting social isolation established in Portugal, which were promptly binded by most citizens, have enabled the number of infected to be contained, which has only now exceeded 10000, as well as the loss of human life, totalling 266. In the territory of Naturtejo Geopark there are still no confirmed cases. The municipalities have contributed a great deal with the implementation of measures to combat the pandemic established at national level, as well as with various mitigation measures and support to families at a closer level. All public gatherings and events, including religious celebrations at a particularly important time in the territory such as Easter celebrations, as well as the closure of museums, cultural centres and other leisure facilities as part of the promotion of social distancing, have been cancelled. Major events, even those that will not take place until the beginning of the second semester, such as the Boom Festival, have been postponed to next year. The same happened with the International Congress on Megalithic Monuments that was being organized at Naturtejo Geopark. Several municipalities have established strict rules of municipal isolation for a period of 14 days for migrants and emigrants arriving in the municipalities, as well as for movements out of the municipalities without reason of compelling grounds. The municipalities of Idanha-a-Nova and Penamacor helped GNR (National Republican Guard) and the SEF (Foreigners and Borders Service) to close the borders of Salvaterra do Extremo and Segura, in order to restrict to the essential, the circulation between Portugal and Spain, one of the most affected countries by the pandemic. Hot lines to local people and businesses have been established to increase communication and reduce doubts. The streets of all urban spaces in the city, towns and villages have been periodically disinfected. Several municipalities have acquired and distributed means of protection and disinfection kits, and have distributed them to police forces, fire brigades, nursing homes and even supermarkets. From the outset, exceptional measures were taken to support families and businesses by reducing or extending the payment of water, sanitation and waste collection bills. The Municipality of Proença-a-Nova established the exemption from the payment of the water bill to companies and from the payment of rents for the closed establishments owned by the municipality. The Municipality of Oleiros has exempted from the payment of this bill trade, firemen and homes. It has also created a monthly bulletin of business support opportunities. The municipalities are distributing basic needs and medicines to the elderly, the chronically ill and even to families in need, as is the case of the Municipalities of Penamacor and Idanha-a-Nova. The Municipality of Oleiros has created a Volunteer Grant to support local institutions and for the screening of COVID-19.

In the context of the current lack of Individual Protection Equipment - IPE's, caused by the SARS-CoV-2/COVID-19 pandemic, the Municipality of Castelo Branco is carrying out the creation of a COVID Resource Centre that aims to enhance and facilitate volunteer initiatives that are emerging in the city, namely in the manufacture of IPE's such as masks, visors, cowls, cover boots, gowns, among other equipment. The COVID Resource Centre is located in the Creativity Factory.

Most municipalities are sponsoring screening campaigns with rapid tests of COVID-19, with priority given to local health professionals and the elderly, especially those in nursing homes where the disease has been uncontrolled. Also those who do not regularly reside in municipalities will be tested with priority. The Municipality of Castelo Branco approved a financial support of 200000 euros for the Local Health Unit. The municipalities of Nisa and Castelo Branco have also established municipal emergency isolation units to provide back-up support to health units. The Pedro da Fonseca Primary and Secondary School in Proença-a-Nova promoted the collection of 42 blood donors with the support of the Coimbra Blood and Transplant Centre, at a time when 27% of blood collections fell.

For those who are isolated at home, municipalities continue to provide social support geared towards this extraordinary period. Proença-a-Nova Origin sells and distributes local products at home. The municipalities of Proença-a-Nova, Idanha-a-Nova and Castelo Branco have created digital platforms and channels to help restaurants and grocery stores now working in "take away" mode only. The Municipal Library of Proença-a-Nova delivers books at home. The Holy Saturday, a much appreciated Easter celebration in Idanha-a-Nova, will this time go through the streets of the village for those who want to participate from their window. The Municipality of Castelo Branco has created a page in facebook - CB. Happens at Home - for family entertainment, where the thematic festivals that would take place in the villages of the municipality are transformed into virtual weekends to promote the villages, with music, activities and workshops under the theme of the festivals. The municipality of Oleiros promotes the Senior Class of physical training at home, through video. Likewise, the municipality of Vila Velha de Ródão provides Pilates classes by the monitors of the Municipal Gymnasium. The "Children's Tale Hour" of the Oleiros' Culture Centre has been put on facebook with the story "My Grandmother has Coronavirus". The Living Science Forest Centre of Proença-a-Nova made available its new book in digital format "Flora explores... Ways to Protect the Forest". The "Read and Give to Read" initiative of the Municipal Library of Vila Velha de Ródão provides books online. The Academia Explore and Learn in Idanha-a-Nova promotes through its blog workshops of tales and poetry for the youngest. Idanha+Baby offer educational activities from 0 to 3 years old. Naturtejo Geopark has daily available on its facebook page educational resources of its own and other national and international reference entities, for teachers and students who, at this particular time, are teaching and learning from home. We care to keep all those who rely on the information about the territory we normally make available up to date.

Due to the changing pandemic situation, more local measures to restrict and support families and businesses are being considered. In the Easter period, which is so important for the diaspora to return to their origins and visit their families, and which is so important for Naturtejo Geopark's Tourism, life will be much different and sadder in our villages and towns. However, it would be much sadder if the pandemic spread among families and welfare institutions. The mandatory containment measures established at national level, and in particular for the Easter period, are the guarantee for an early return to normal conditions for the celebration of life. Naturtejo Geopark will contribute to the re-establishment of a healthy and conscious life.



**28 February – ITB Berlin – The biggest world trade fair is cancelled.** So, unexpectedly and at the last moment, the German authorities forced the cancellation of ITB. All the preparations made by the UNESCO Global Geoparks that organized themselves for the world's largest Tourism Fair fell apart. The 72 m2 UNESCO Global Geoparks stand was ready in time and already being transported to Germany by a local carrier, when we told the truck that was on the border between Spain and France to turn back. The stand is now stored by the kind courtesy of the village of Orvalho, as it happens every year. The losses have added up. Fortunately, the cost of renting the stand area, as well as the passes, will be entirely covered by ITB. We will store the promotional materials of the partner geoparks until next year. To the geoparks partners, we give the certainty that we will be in the next year ITB's edition even more willing to promote our brand UNESCO Global Geoparks to the international trade. With the support of UNESCO Global Geoparks Association we will once again set high standards of geoparks in their international promotion.



**3 March – Workshop “Water, rocks and living beings, all united”.** The Workshop took place under the Educational Program "Geopark goes to School" at EB1 da Mina, integrated in Afonso Paiva School Group, in Castelo Branco. 43 students and 2 3rd and 4th grade teachers participated in the Workshop, in the scope of the subject of Environmental Studies. During the activity, students learned about Naturtejo Geopark and its Bio and Geodiversity, through a presentation, documentary, observation of rocks and plants and a game about the animals that exist in the territory. The workshop was boosted by Manuela Catana and Catarina Caria.



**6 March - Citizenship Class of the Senior University of Idanha-a-Nova.** AThe Citizenship class of the Senior University of Idanha-a-Nova was once again dedicated to Naturtejo Geopark. More than a class was an exchange of ideas with those who know the territory best and longest. The group spoke of the development strategy of geoproducts and other products that represent the culture of the region and that have the potential to be integrated. Local products that are becoming less and less common were recalled and the importance of recovering the seeds of local varieties such as the Ladoeiro's Watermelon, the Ox Heart Tomato, Idanha-a-Velha's Morocco Cucumber or Penha Garcia's Winter Tomato, products that are increasingly difficult to find. Finally they talked about Toulões - Peonia Village and the importance of Peonia broteri, in the context of the Geopark.



**6 to 8 March - New findings in Vicentina Coast.** The collaboration project with Odemira municipality in the south of the country is still under development and is now being strengthened in the areas of Environment and Education. This project aims to study the paleontological record of the Quaternary age formations of the Portuguese SW coast. Step by step, it has involved researchers of various fields of geosciences and archaeology, as Naturtejo Geopark, the Polytechnic Institute of Tomar, the Faculty of Sciences and Technology of the University of Coimbra, as well as the Spanish universities of Huelva and Seville. The goal is to understand the environmental changes during the Last Glacial, the impact of climate change on the landscape and biodiversity that led to the extinction of species. The last field campaign, coordinated by Carlos Neto de Carvalho, brought great news. From Aivados Beach to Telheiro Beach new occurrences of mammal and animal footprints have emerged and will now be the target of further studies by the research team, which includes the absolute OSL dating of the levels with footprints found in the succession of fossil dunes, as well as the study of petrology of these rocks.



**11 March - Evasões Magazine visit the Ichnological Park of Penha Garcia.** Two journalists from Evasões Magazine, reporting in the region, visited the Ichnological Park of Penha Garcia. In that Naturtejo Geopark's geomonument they discovered millions of years of history of the planet and an impressive geological heritage of international reference. They walked along the Fossils Trail, visited the Fossil House and the Mill Complex of Ponsul Valley, accompanied by the geologist Joana Rodrigues.

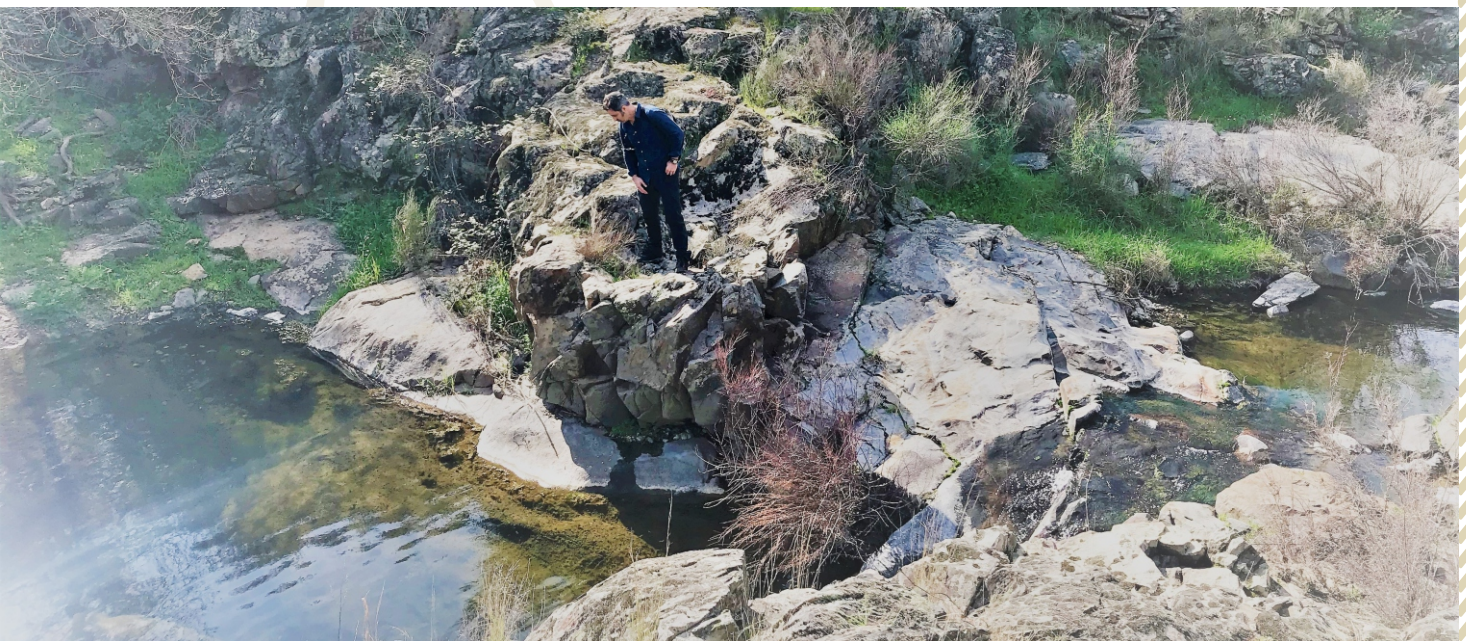
**24 March - Naturtejo Geopark's Revalidation made official.** It's official: Naturtejo Geopark passed its quadriennium assessment. From 31st August to 2nd September 2019, the UNESCO Global Geopark Council held its fourth meeting in the Rinjani-Lombok UNESCO Global Geopark, Indonesia. Among the discussion points of that meeting was the revalidation of Naturtejo Geopark as UNESCO Global Geopark. According to the evaluation report prepared by the experts who were at Naturtejo Geopark in July, the UNESCO Global Geoparks Council decided to renew the status of Naturtejo Geopark for another four years. In the official letter sent to Naturtejo by Kristof Vandenberghe, Secretary of the International Geosciences Programme and Head of the Earth Sciences and Geohazard Risk Reduction Office, five recommendations are presented that need to be fulfilled in the next four years:

1. Consider improving Naturtejo Geopark territory visibility by replacing old interpretation panels;
2. Update and upgrade Naturtejo Geopark website ensuring the quality of English translation;
3. Develop links between geodiversity and other heritages (i.e., biodiversity, culture) through interpretation, education, guided tours and walking trails;
4. Strengthen cooperation with the new MuTEX (Wool Museum) in Retaxo;
5. Establish a Naturtejo Geopark Visitor Centre as a central point for all information sharing, engaging and involving geopark partners.



**Landscape Interpretation advances in Barrocal Park.**

**Landscape Interpretation advances in Barrocal Park.** The Barrocal Park project is an investment of more than one million euros by the Municipality of Castelo Branco. This project aims the conservation and enhancement of a landscape characteristic of Naturtejo Geopark, with the protection of a total of 40 hectares, the equivalent in area to 40 football fields, near the centre of the only town of Naturtejo Geopark, and a significant part of its total population. With the signature of the landscape architecture company - Topiaris and starting at the end of 2017, this project has been working on the protection and development of a set of accessibilities that intends to transform a landscape characteristic of granite geofoms into a naturalised habitat and a place of enjoyment for the local community and a tourist reference point of the region. This is the most ambitious geodiversity investment project ever undertaken in the territory of Naturtejo Geopark and could be an added value bringing the geopark closer to the majority of its population. Now that the construction work is almost finished it is time to work on interpreting the natural and cultural values that will strengthen it. Naturtejo Geopark has supported the team of architects led by Teresa Barão developing inventories of geodiversity, biodiversity and archaeology, relying on a group of experts. The geodiversity inventory has 42 sites of geological relevance. In recent weeks, detailed fieldwork and mapping have been intensified, covering the entire area of the park. After the confinement, contacts and videoconferences with the team of architects and the team of researchers for the development of the logo, the exclusive directional signage, the presentation leaflet and the interpretative panels for viewpoints and points of interest are multiplied. The group of researchers will now work with Topiaris' creatives on a guide that will allow them to present the results of the research work and, on the other hand, will provide the entire scientific basis that will support subsequent projects to enhance the Barrocal Park.



**Participation and projects application.** Naturtejo Geopark is currently preparing its participation in Iberian and European projects. Among others, the Erasmus+ GEA - Geotourism and Sustainable Development in Rural Areas project deserves mention. This project is coordinated by the Global Geopark Rocca de Cerere, Italy and has as main goal the discussion between territories classified as UNESCO geoparks on sustainable and differentiating tourist practices and the development of guides to support the development of geotourism strategies and their dissemination in local business communities. On the other hand, and regarding scientific research applied to knowledge and uses of the territory, the application to the Foundation for Science and Technology of the Break Up project - Evolution Rift-a-Drift of the Iberian Massif deserves mention. This project, coordinated by Prof. Martim Chichorro, from the Faculty of Sciences and Technology of the University Nova de Lisboa, involves geoscientists from various research institutions in Portugal and will have as one of the main case studies the relevant geological heritage of the Naturtejo Geopark, as one of the most important areas in Portugal for understanding the evolution of the opening of the Rheic Ocean. At the logistical and scientific level this project is strongly cherished by Naturtejo Geopark as it will allow significant advances in the knowledge of the geological processes and geological history that constitutes the relevant landscape of this region. On the other hand, this year the Portuguese geoparks and the geopark projects under development in Portugal will develop a joint agenda for climate change, which is being coordinated by Estrela Geopark.

Thus, in a framework of rapid climate change and accelerated changes in land use and occupation, promoted by unbalanced regional and national socio-economic dynamics, the project "Year for Climate Change in Portuguese Geoparks" intends, within the remit of UNESCO Global Geoparks, to incorporate various measures, implement strategies for sustainable territorial development in order to minimize the problems and challenges identified in different territories. In this way, the project will contribute to the identification of the main problems associated with climate change, enhancing the application of good adaptation and mitigation practices in territories classified as UNESCO Global Geopark, or aspiring to this designation, contributing to the achievement of SDG13. In parallel, the project contributes to strengthening networks as defined in Objective 17 of the same agenda.



**GEOfood in Naturtejo Geopark.** GEOfood is an international brand that aims to promote sustainable agriculture and food production practices. It also aims to increase everyone's awareness of the importance of soils and the rational use of water resources, geodiversity, landscapes, and all natural and cultural heritages in UNESCO Global Geoparks.

The brand also provides an opportunity to promote authentic tourist experiences in a territory distinguished as a sustainable tourist destination and promoter of health and well-being.

Naturtejo Geopark is a member of the GEOfood brand, intended for UNESCO Global Geoparks and coordinated by Magma Geopark (Norway). Currently 3 companies in the territory have already joined: GeoRestaurant "Petiscos & Granitos", Geocakes and the restaurant Helana. Presently the articulation of the new brand with the existing "Geoproduct of Naturtejo Geopark" is being made, through the adaptation of regulations and procedures, in order to enhance and take advantage of each in the best way.



Joana Rodrigues, Juliana Rodrigues, Cátia Sofia, 2 outras pessoas

14:22

NESTA CONVERSA:



**Rocks of virtual Naturtejo Geopark.**



**Rocks of virtual Naturtejo Geopark.** In the scope of a graduation project in Information and Multimedia Technologies, from the School of Technology of the Polytechnic Institute of Castelo Branco, a virtual library of Naturtejo Geopark is being developed. Based on the collection of rocks developed by the geopark, in a joint initiative with the Portuguese geoparks, the contents are being transformed into multimedia environment. The project is being developed by the finalist student João Filipe Nunes, guided by Professor Pedro Silva and geologist Joana Rodrigues, currently doing internship at Naturtejo Geopark, and also integrates students of the Professional Higher Technical Course in Multimedia Product Development. The scientific and didactic contents are the responsibility of Carlos Neto de Carvalho and Manuela Catana, from Naturtejo Geopark.



**Portuguese Geoparks Tours.** The Guide of the Portuguese Geological and Mines Sites is an important online platform for the dissemination and promotion of Portugal's geological and mining heritage that brings together partners from North to South of the country, such as museums, interpretation centres, sciences centres, geoparks, mines and sites of geological interest.

A new Tour dedicated to the Portuguese Geoparks was developed, which includes 37 points to visit in the UNESCO Global Geoparks Naturtejo, Arouca, Azores and Terras de Cavaleiros and the aspiring Estrela and Coast of Viana do Castelo. The platform presents a tool that allows the construction of a personal itinerary, with all the travel information and logistical support to the visitation. Along with the development of this Tour, Naturtejo Geopark is integrating new visitation points in the territory. Teacher training is also being prepared in order to enhance the Mines Guide as a pedagogical tool.

**Support for the development of the commemorative exhibition Lisboa European Green Capital 2020.** The "Natural Variations" exhibition will be part of this year's Lisboa - Green European Capital celebrations. This exhibition aims to show the natural habitats that exist in Portugal and their natural history through dioramas. The research work of Carlos Neto de Carvalho concerning the footprints of vertebrates of the Portuguese Quaternary will be present in this exhibition represented by the footprints of the last European elephants discovered in Odemira, as well as the bear footprints discovered in the same region. The exhibition will be curate by Cristina Branquinho, a researcher from the Faculty of Sciences of the University of Lisboa, and will also feature Filipa Vala, a science communicator from the same faculty.



# TOURISM<sup>3</sup> INNOVATION JOURNEYS

Community-Based Tourism in Central Portugal  
Universidade Lusófona | Auditório Agostinho da Silva | 05.12.2019 às 13:30



**"Tourism Innovation journeys" Project.** Naturtejo Geopark participates in the academic project Tourism Innovation Journeys, promoted by the Lusófona University of Humanities and Technologies, which has as main objective the valorisation of community-based tourism in the Central region of Portugal. After the Inaugural Conference, in December, and in collaboration with the geopark, students have been developing value proposals for Naturtejo Geopark, UNESCO Global Geopark. The presentation of the final works in the territory scheduled for early June is being considered given the current circumstances.



**Naturtejo Geopark brochures in three languages.** In the preparations for the international tourism fairs in Berlin and Lisboa, meanwhile postponed, we developed a set of promotional materials that aims to divulge Naturtejo Geopark - UNESCO Global Geopark and its market integrated tourism packages of high quality. Thus, Naturtejo Geopark presentation leaflets, the existing walking trails and the Geoproducts certified by Geopark were edited in different languages. The Tours by Naturtejo Geopark, the exclusive tourist programs of Naturtejo in collaboration with its Members and partners have been revised with new proposals. This has created better conditions for the dissemination of the territory, its tours and tourist products, both in the national and international markets.

**Educational activities in Naturtejo Geopark don't stop!!** Despite the period of social distancing to which we are resigned, with schools closed and everyone at home Naturtejo Geopark doesn't stop and neither does its educational service. Manuela Catana and Catarina Caria have been making sure that this doesn't happen. From the very beginning they have translated the contents of GEOnaturschool micro site into English. On the other hand, they took the opportunity to make available in GEOnaturschool micro site the educational resources produced in the GEOSchools Project, suggestions of educational resources and activities in geosciences for sustainability, proposed by several entities, through the respective links. Meanwhile, at Naturtejo Geopark Facebook page, several proposals for educational resources and activities in Geosciences for Sustainability were introduced, both from Naturtejo Geopark and other entities. During the following weeks there will be the further development of educational resources applied to Naturtejo Geopark.

# IMPACT OF GEOPARK IN MEDIA



## Newspapers & www

EGN Magazine - Proença-a-Velha village celebrates 800 years by promoting research and hosting cultural events in Naturtejo Geopark

# SCIENTIFIC CONTRIBUTIONS FOR THE GEO PARK AND THE GEOSCIENCES



- Caninas, J., Henriques, F., Chambino, M., Salvado, P. 2019. Carta Arqueológica da Comunidade Intermunicipal da Beira Baixa 106 anos depois de Francisco Tavares Proença Júnior. *Scientia Antiquitatis*, 2, 5-48.

## PROMOTION FOR THE GENERAL PUBLIC



- Geraldtes, J.A. – Proença-a-Velha village celebrates 800 years by promoting research and hosting cultural events in Naturtejo Geopark. European Geoparks Magazine, 17, p. 45.
- Brochure Naturtejo Geopark (English and German)
- Brochure Walking Trail of Naturtejo Geopark (English)
- Tours by Naturtejo Geopark (Portuguese and Spanish)



## PROMOTION FOR THE GENERAL PUBLIC



#StayHome



### Visit Naturtejo Geopark in:



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



[www.facebook.com/geoparknaturtejo.mesetameridional](https://www.facebook.com/geoparknaturtejo.mesetameridional)



[www.instagram.com/geopark\\_naturtejo/](https://www.instagram.com/geopark_naturtejo/)



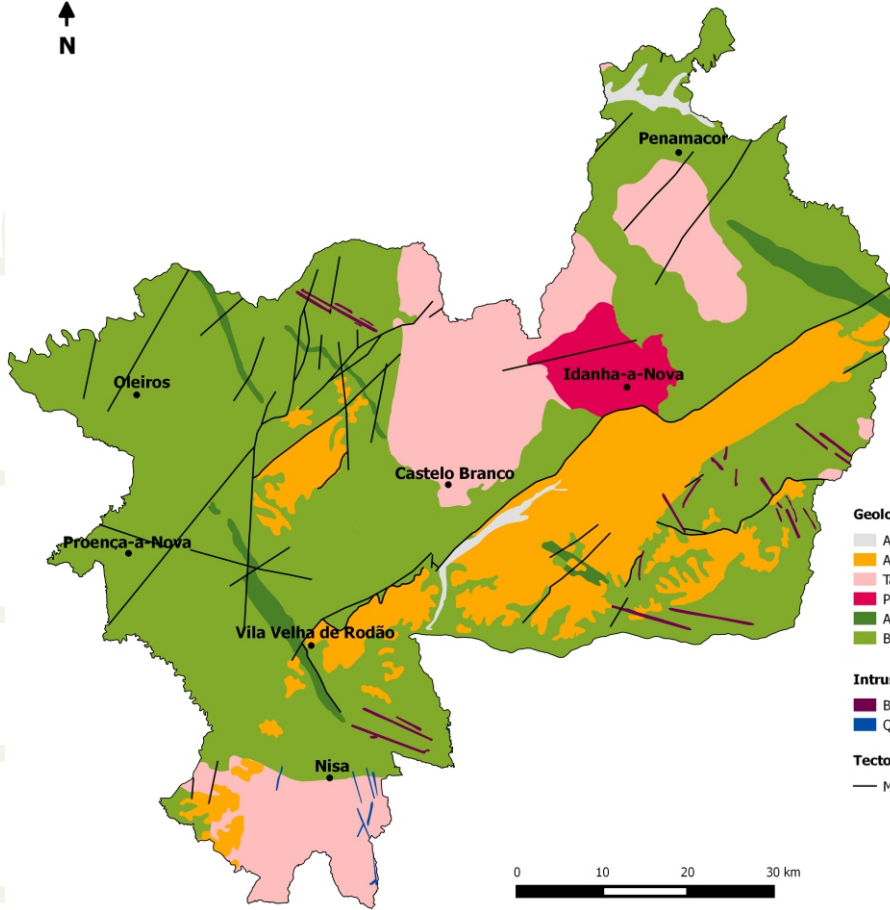
[www.youtube.com/geoparknaturtejo](https://www.youtube.com/geoparknaturtejo)



[issuu.com/geoparknaturtejo](https://issuu.com/geoparknaturtejo)



[www.slideshare.net/geoparknaturtejomesetameridional](https://www.slideshare.net/geoparknaturtejomesetameridional)



**Geological Formations (Ma-Million years)**

- Alluvium and fluvial terraces - Pliocene-Holocene (1Ma-present)
- Arkoses, breccias and conglomerates - Eocene-Pliocene (50-2.6Ma)
- Tardi-Variscan orogenic granites (315-300Ma)
- Pre-Variscan granodiorites (480-472Ma)
- Armorican Quartzite and schists - Ordovician-Lower Silurian (488-435Ma)
- Beiras Group (schists and greywackes) - Neoproterozoic (610-542Ma)

**Intrusive rocks**

- Basic rocks, aplites and pegmatites
- Quartz

**Tectonic**

- Main faults

## Geoparks: Geology with human face





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GEOPARK NATURTEJO DA MESETA MERIDIONAL EUROPEAN AND GLOBAL GEOPARK MONTHLY REPORT

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**NATURTEJO UNESCO GLOBAL GEOPARK - E-MAGAZINE**