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CRUZIANA

GEOPARK NATURTEJO - GEOPARQUE MUNDIAL DA UNESCO - E-Magazine



MONTHLY ACTIVITIES

November - Erasmus Mundus Pangea Joint Master in Palaeontology. The Erasmus Mundus Pangea Joint Masters is a 2-year Master programme designed to offer unique and dedicated training and experience in applied palaeontology and paleobiology, including geoconservation and geological heritage.

The aim of the Pangea programme is, through the integration of strengths in a consortium of 4 recognised European universities and associated partners, to respond to the academic challenges posed by these renewed needs for palaeontological expertise.

Naturtejo UNESCO Global Geopark is an associated partner to this programme!

More info at: <https://master-pangea.eu/>



November 2nd to January 31st - Exhibition "The Forest that Unites Us" in Terras de Cavaleiros Geopark. To mark the Native Forest Week, the exhibition "The Forest that unites us" travelled to Terras de Cavaleiros Geopark.

This exhibition was developed in 2018 by the Living Science Forest Centre (in Proença-a-Nova) and Naturtejo Geopark, aiming to raise awareness to the wealth, diversity and fragility of the Forest, following the year 2017, when the region was strongly affected by huge forest fires. Unfortunately in 2020 the territory was again threatened by major fires that devastated large areas in the municipalities of Oleiros and Proença-a-Nova.

In a dynamic and interactive way, the exhibition allows to travel along the growth rings of a tree, feel the forest scents, get to know the fauna and flora, the trophic relations meaning who serves as food for whom, which trees are more resistant to fire and much more.

The "Forest that unites us" presents the forest of Naturtejo Geopark, with emphasis on the region of Proença-a-Nova, assuming itself as an example of Portuguese forest diversity.

The exhibition is on display in the Exhibition Hall of Terras de Cavaleiros Geopark Tourism Office, until January 31st, with the security guarantee of the Clean & Safe - Geoparks seal.

November 2nd - Monsanto GeoHotel School joins GEOfood. Monsanto GeoHotel School is a hotel unit located in the Inselberg of Monsanto geomonument and managed by the Idanha-a-Nova School of Management. This Geohotel associated to the Naturtejo UNESCO Global Geopark has recently joined the international brand GEOfood that promotes the consumption of local and organic certified products. The GEOfood brand is already in 16 UNESCO Global Geoparks, included in 9 countries.

More than 50 restaurants and 40 producers around the world have joined in this extremely tasty experience that promotes local, quality and sustainable food.

In Portugal, all the UNESCO Global Geoparks are part of this growing network!

November 3rd – Application and evaluation of a prototype of Naturtejo Geopark's Geomonuments Board Game. Over several months a board game prototype on Natural and Historical-Cultural heritage was designed and developed, based on the 17 Geomonuments, to be used in the Educational Programmes of Naturtejo Geopark. The prototype developed and now tested with students is an educational resource developed by Manuela Catana. On this day, the game prototype was tested with 18 students from the 10th A class of the José Silvestre Ribeiro School, in the Biology and Geology class. Students filled in an online evaluation questionnaire about the game where they expressed their opinions and gave suggestions for improvement. The game is aimed at students over 12 years of age, from the 3rd Cycle of Basic Education and Secondary Education and can be used as an educational resource in Natural Sciences, Biology and Geology, Citizenship and Development classes, among others. It is intended that after improvements have been made and already in a definitive version, including design and materials used, several copies of the game can be distributed in the future to the School Groups in the geopark territory.



November 6th – Meeting with the Scientist in the Living Science Forest Centre. Another edition of the Living Science School initiative took place at the Living Science Forest Centre (Proença-a-Nova), aimed at Primary School students. This national programme aims to deepen and strengthen the relationship between primary school students and science, with a week spent entirely at the LSC where they carry out numerous activities in various areas and interact with researchers.

"Meeting with the Scientist" with 4th grade class of the Basic School of Proença-a-Nova, the students got to know better the Geology and the work of the Geologist. After prepared and organized themselves in advance, students tried to imagine the work of the geologist through very creative drawings and sent dozens of questions about the activity of the geologists, their studies, routines and methods, the work in Naturtejo Geopark but also some questions about challenges, discoveries and achievements, difficulties and mishaps.

Geologist Joana Rodrigues of Naturtejo Geopark has made known some of the geologist's areas of activity, many of them less known and the importance of the scientific discoveries of geologists for a better life on Earth! There was also a moment to clarify many curiosities about the planet: Why are some stones precious and others not? Which are the oldest living beings that have lived on Earth? Is it true that continents move? How old is the Earth? How do you study the Earth from the inside? and many others.

To finish the almost 3 hours dedicated to geologist, with an intense and lively exchange of ideas and many questions, the students travelled through the main episodes in the history of the planet, from its emergence to the present day, in a practical activity adapted to the current restrictions due to the COVID-19 pandemic.



November 7th - Barrocal Park: new geological attraction opens doors. The Barrocal Park, the most recent interpretative landscape space and the main project of valorisation of the geological heritage developed in Naturtejo UNESCO Global Geopark in recent years, has already opened. Without formal opening due to the current situation, it was imperative to open, especially for those who live in Castelo Branco and for those who visit this city. There are 40 hectares of granite landscape valued, very close to the city centre of Castelo Branco. The accesses designed by the award-winning Topiaris landscape architecture studio allow the enjoyment and understanding of the evolution of natural and urban landscapes of a vast area around Castelo Branco. 310 million years of an evolving landscape can be discovered through interpretative panels and audio-guides, as if we were walking, at the pace we wish, through the exhibition of a Museum dedicated to Landscape. In Barrocal Park we are not in a museum. This is a living space of the city where one can live together with a native ecology in regeneration, a space for environmental education, a lot of space to simply get lost in Nature, with the family or in singular communion. The Barrocal Park finally opened and the great affluence of families on the first day proves that the natural space dedicated to Castelo Branco is lacking. More than a thousand visitors passed by the Barrocal Park only in its first week. Carlos Neto de Carvalho was responsible for the first training action about Barrocal that took place for the technical staff that is managing the park. More information at www.barrocal-parque.pt.

November 7th - "Village Stories: Between Night and Dawn". The historical village of Monsanto hosted the online event "Stories of the Village: Between Night and Dawn", as part of the cycle "12 in Network - Villages in Party". This cycle is promoted by the Historical Villages of Portugal association, and has the partnership of the municipality of Idanha-a-Nova, in the district of Castelo Branco. The initiative dedicated to the promotion of this historic village was designed for the current pandemic context and will be carried out from Monsanto, with online broadcasting. The programme follows the current safety rules and is adjusted for online broadcasting, and can be followed through Facebook of the Historical Villages of Portugal and the municipality of Idanha-a-Nova. Workshops, guided tours, documentaries and concerts are some of the activities that can be followed through exclusive online or live streaming. It is around the stories that the Most Portuguese Village has to tell that music, light, thematic visits and innovative gastronomic experiences are joined in Monsanto's unique scenography.

November 17th and 18th - 1st Digital Forum of the Global Geoparks Network. The first Digital Forum of the Global Geoparks Network was held for two days. More than two hundred official representatives of UNESCO Global Geoparks, as well as individual members and observers followed the work, aiming to present the results of the work developed. Nickolas Zouros and Guy Martini introduced some examples developed by UNESCO Global Geoparks during the pandemic, including digital activities. These activities were further reinforced in the presentations of each of the continental networks. The following day the new evaluation documents of geopark applications were discussed, as well as the possibilities of relation with the UNESCO International Geosciences Programme. Carlos Neto de Carvalho represented Naturtejo UNESCO Global Geopark.



GOLD

URBAN LANDSCAPE

TOPIARIS LANDSCAPE
ARCHITECTURE

PORTUGAL

Barrocal Park

November 19th – Barrocal Park wins World Architecture News Awards. Barrocal Park has just won the Wan Awards Gold in the Urban Landscape Category. This is one of the most important international architecture awards, the World Architecture News Awards - Wan Awards, in the category "Urban Landscapes". An Urban Park that is an international reference for Landscape Architecture and for the enhancement of the landscape and its geological context!

<https://www.wanawards.com/finalists/barrocal-park/>



November 19th – Online Workshop "Gender balance and equal opportunities in Geosciences" promoted by the Portuguese Association of Geologists. The Portuguese Association of Geologists (APG) participates in the ENGIE Project - "Encouraging Girls to Study Geosciences and Engineering" as a partner of the European Federation of Geologists. This project, supported by the Raw Materials Community of the European Institute of Innovation and Technology (EIT RawMaterials), aims to arouse the interest of girls between 13 and 18 years old to study Geosciences and Engineering related disciplines, improving the gender balance in these areas. As part of this project, APG organised an online workshop with geoscientist women, where several issues on gender balance in the geosciences and equal opportunities were discussed. The event was a reserved workshop, without live streaming. Manuela Catana, as Technician of the Educational Action Service of the Municipality of Idanha-a-Nova and responsible for the Educational Programmes of Naturtejo Geopark was invited by the APG to join the panel of geoscientist women to share her professional experiences during the workshop.

November 20th to December 6th – “Out of Place” – International Festival of Ancient Music. The 9th edition of the Out of Place Festival - International Festival of Ancient Music was adapted to the current times. With a large part of the proposal presented "at home" (online) and another, smaller and limited, "in place" (in person), the 2020 edition of the festival will take place in the municipality of Idanha-a-Nova, UNESCO Creative City of Music. After several months designing (and redesigning) all the scenarios, the Arte das Musas - author and producer of Out of Place - opted for the full realization of this pivotal project for the territorial development of the borderland and the municipality of Idanha-a-Nova, continuing to prove that, in the rural world, there is also sensitivity, modernity and innovation, and - in a pandemic context - to show that, here, there is also resilience, persistence and will.

Thus, the programme confirmed for 2020 has been entirely revised and results in a hybrid proposal, occupied and experienced by Portuguese musicians and projects. This work is more extensive than the programming proposal itself as it reaches the artistic fabric and seeks to promote - from a rural, interior and borderland territory - a vision of culture linked, in an umbilical way, to the experience of the territory, the "place".

Despite the enormous adaptation work that the circumstances imply, it was possible to maintain the partnership between the Arte das Musas and the State (central and autarchic) for the realization of the Out of Place, a partnership that makes this festival happen again - from the rural world - always safeguarding health safety issues, especially sensitive in these aged territories.

Out of Place is a project of the Arte das Musas in partnership with the Municipality of Idanha-a-Nova / UNESCO Creative City of Music, and supported by Naturtejo UNESCO Global Geopark.

Website: www.foradolugar.pt

November 23rd to 29th - Science and Technology Week with virtual visits to former geopark mines.

Celebrating the National Scientific Culture Day, the Science and Technology Week took place aiming to introduce the science done in Portugal. Naturtejo Geopark joins two projects developed in partnership with the Superior School of Technology - Polytechnic Institute of Castelo Branco - ESTCB Institutional.

Two proposals for virtual visits to ancient mines in our territory so that, from home, you can walk through a mining gallery or go back to the Iron Age mining!

- Monforte da Beira in the Iron Age

- E-Minas: Virtual Tour of the Segura Mines.

Detailed programme: www.cienciaviva.pt/semanact

November 23rd - Virtual celebration of the Native Forest Day with two challenges proposed on Facebook of Naturtejo Geopark.

This year, due to the Covid-19 pandemic, it was decided not to promote actions in person, but to mark this date through Facebook, proposing two challenges for both school public and general public. The Native Forest Day aims to promote the importance of conservation of native forests, in a day more adapted to the climatic conditions of Portugal and Spain to sow or plant trees or other plants.

The first challenge was to sow or plant native species of the territory of Naturtejo Geopark (between November 23rd 2020 and the end of February 2021), such as cork oaks, oaks, holm-oaks, strawberry trees, litter and bastard lilies. In the second challenge, the memory game was presented: "Native Plants of Naturtejo Geopark", which includes the six native species mentioned above. Just print the cards, cut them out and play at school or with your family. The memory game is available for download at:

http://www.geonaturescola.com/ficheiros/conteudos/files/Jogo%20Mem%C3%B3ria_Plantas%20Nativas%20Geopark%20Naturtejo.pdf.

November 25th - Scientific contributions to the exhibition "Natural Variations: a journey through the landscapes of Portugal, open to the public in Lisbon"

Portugal presents high richness landscapes, natural values and biodiversity. This diversity is the result of the interaction between climate, geology and orography, and is accompanied by enormous cultural diversity. The exhibition "Natural Variations" makes this diversity known and felt, through the representation of the main national landscapes and protected areas, offering visitors an impossible journey: knowing the main Portuguese ecosystems, "gathered" in 1200sq.m. In this immersive experience, in which all senses are summoned, travellers climb a mountain, descend into a cave and dive into the ocean depths. Visitors stroll around finding plants, animals and fossils, listening to legends and discovering relationships between species, people and landscapes that range from simply sharing a common space to predation, and from cooking to literature.

The exhibition is divided into ten main areas corresponding to ten ecosystems: urban, mountainous, forest (including woodland, cork oak forest and steppe), limestone massifs (including caves), aquatic systems (rapid waters, slow waters, marsh), estuary, sandy coast, rocky coast, oceans and island ecosystems, with a focus on Azores and Madeira archipelagos. The exhibition areas are defined by combining scenic structures, photography, video and audio with biological specimens and models from more than 140 species.

Throughout the exhibition, the Natural Parks and other protected areas where each ecosystem is found are identified on maps. At the end, an interactive panel allows to explore these areas in more detail, inviting for real visits.

An exhibition at the Museum of Natural History and Science in Lisbon that is a journey in space but also in time, reporting episodes of the evolution of the landscapes of Portugal. The history of the great mammals that lived in Southwest Alentejo during the Upper Pleistocene, revealed by Carlos Neto de Carvalho through the record of footprints, can be found in this exhibition held in Lisbon - European Green Capital 2020 and curated by Cristina Branquinho. Organized by the Municipality of Lisbon, the University of Lisbon, through the Faculty of Sciences and the National Museum of Natural History and Science, and the Institute for Nature Conservation and Forests, I.P.



IMPACT OF GEOPARK IN MEDIA



TV & Radio

November 7th (Beita Baixa TV) – Barrocal Park opens to the Public

Newspapers & www

October 31st – (Visão Magazine) – Visão Guide: Hiking, the best trails

November (Ensino Magazine – cover) – Portuguese Park Project wins world prize - Trip to the centre of Barrocal

November 6th (Público) – Castelo Branco opens Barrocal Park “Refreshing Oasis of Natural History”

November 6th (BeiraNews) - Barrocal Park opens to the Public this Saturday with free entrance

November 7th (Ensino Magazine) – Portuguese Park candidate to the best in the world

November 11th (Diário Digital Castelo Branco) – Barrocal Park integrates Naturtejo Geopark and Tejo/Tajo International Crossborder Biosphere Reserve

November 11th (Gazeta do Interior) – Barrocal Park opens with free entrance

November 12th (Reconquista) - Barrocal Park has already opened to the public

November 14th (Expresso) - Nature's space

November 18th (Expresso “Boa Cama Boa Mesa”) - New park in Castelo Branco has viewpoints, walkways and nature trails

November 20th (Diário Digital Castelo Branco) – Barrocal Park wins International Award

November 20th (Público) - Barrocal Park in Castelo Branco wins international architecture award

November 21st (viagens.sapo.pt “Vou Ali e já Venho) – The surprising granite figures of Castelo Velho

November 23rd (www.noticiasominuto.com) – Natural Park in Castelo Branco receives architecture award

November 26th (Reconquista) - Barrocal Park project wins international prize

SCIENTIFIC CONTRIBUTIONS FOR THE GEPARK AND THE GEOSCIENCES



- PSONIS, N., NETO DE CARVALHO, C., FIGUEIREDO, S., TABAKAKI, E., VASSOU, D., POULAKAKIS, N., KAFETZOPOULOS, D. - Molecular identification and geographic origin of a post-Medieval elephant finding from southwestern Portugal using high-throughput sequencing. *Scientific Reports*, (2020) 10:19252 | <https://doi.org/10.1038/s41598-020-75323-y>.
- BAYET-GOLL, A., UCHMAN, A., DARAEI, M. & NETO DE CARVALHO, C. - Crowded *Trichophycus* ichnofabrics in the early Ordovician successions of central Iran: insight into the Ordovician radiation. *Lethaia*, <https://doi.org/10.1111/let.12404>.
- NETO DE CARVALHO, C., FERNANDES, P., TOMÁS OLIVEIRA, J. & ANACLETO, J.A.. - *Paleodictyon maximum*: forma típica da Icnofácies de Nereites em ambiente de rampa carbonatada do Jurássico Médio da Praia da Mareta (Bacia do Algarve, Portugal). *Comunicações Geológicas*, 107(1), 13-20.

PROMOTION FOR THE GENERAL PUBLIC



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PANGEA Project Overview
 PANGEA stands for PAleoNtology Geoheritage & Applications.
 We offer 3 different tracks fully taught in English:

- Paleobiology
- Applied Paleontology
- Geconservation

4 European institutions
 Depending on the chosen track you will undertake mobilities in the universities of our consortium:

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 - Up to 1 000€ per month
 - Up to 1000€ for your installation costs
 - Up to 3000€ for your travel costs

THE FIRST CALL FOR APPLICATIONS OPENS ON NOVEMBER 22nd!

Contact info: master-peangea@univ-lille.fr Website: <http://master-pangea.eu> Funding: Co-funded by the Erasmus+ Programme of the European Union

EXPOSIÇÃO
A FLORESTA QUE NOS UNE

DE 02 DE NOVEMBRO DE 2020
 A 31 DE JANEIRO DE 2021

SALA DE EXPOSIÇÕES TEMPORÁRIAS
 POSTO DE TURISMO
 MACEDO DE CAVALEIROS

PROMOTION FOR THE GENERAL PUBLIC



GEO FOOD

WEBINAR

GEOfood: uma experiência extremamente saborosa em Geoparques Mundiais da UNESCO

Palestrantes:
Fabiano Souza da Silva
Raphael Ocelli
Joana Rodrigues
Sara Gentilini

Debatedores:
Carlos Bernardes
Leôncio Diamante
Valéria Rodrigues
Mozair José Pinto
Jonas Guimarães

Moderador:
Gustavo Lacorte

04 DEZ 2020 13:00

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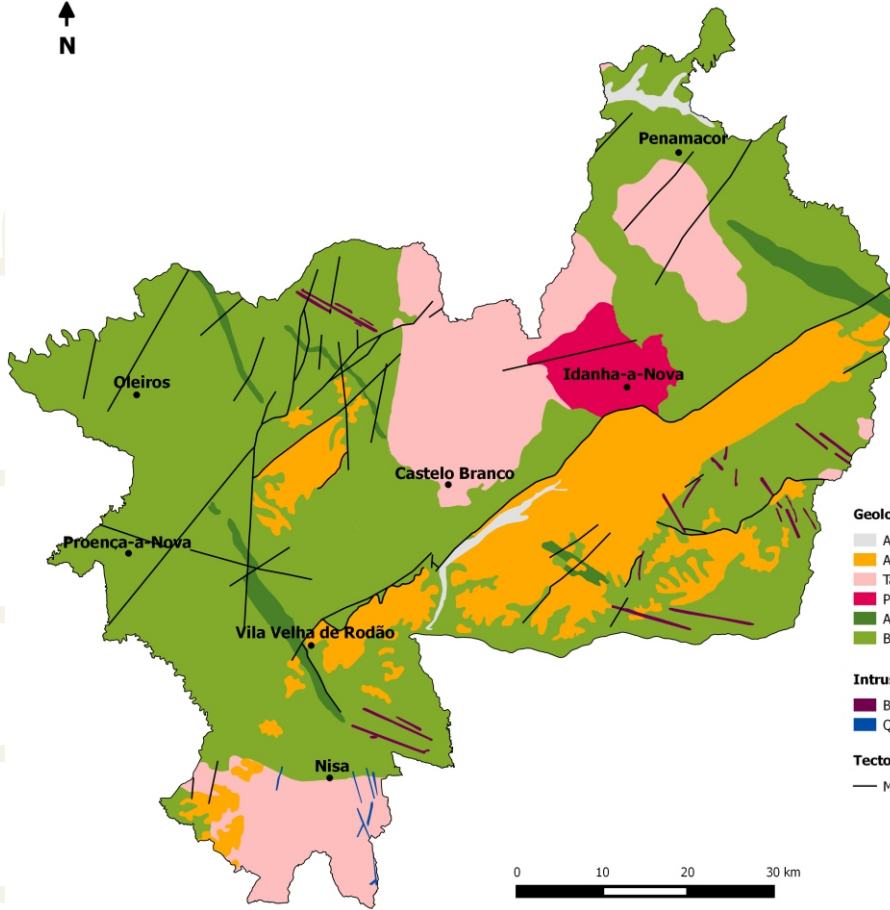
www.youtube.com/geoparknaturtejo



issuu.com/geoparknaturtejo



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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