



### **In this issue:**

Discovering Geomonuments with Living Science in the Summer  
In the revalidation of European Geoparks  
Naturtejo Geopark's palaeontological discoveries fill the world's media during August  
...and more!

# **CRUZIANA**

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



# MONTHLY ACTIVITIES



**August 1st to 4th - In the revalidation of the English Riviera Geopark, England.** The English Riviera Geopark, in England, is one of the smallest Geoparks in the world, with an eminently urban territory that includes around 41 square kilometres of marine area.

It joined the European and Global Geoparks Networks in 2007 and has now received another mission to revalidate its UNESCO seal. Joana Rodrigues was part of the team of evaluators, along with Javier Lopez Caballero, from Villuercas-Ibores-Jara Geopark (Spain). In addition to the official representatives, team, local entities, partners, researchers and a representative of the UK National Commission for UNESCO, the mission was attended by King Charles III's representative in the County of Devon, Lord-Lieutenant David Fursdon, who emphasised the King's commitment to supporting and promoting the conservation of natural heritage and sustainable development.



**August 4th and 23rd – Gold Mining in Ocreza River with Living Science in the Summer.**

**August 4th and 23rd – Gold Mining in Ocreza River with Living Science in the Summer.** In 2023, Living Science in the Summer programme, promoted by the National Agency for Scientific and Technological Culture, includes more than 600 initiatives across the country, focusing on the human impact on the planet and "nature's warnings". Between July 15th and September 15th, Living Science Forest Center offered 20 science activities in the territory, 10 of which were in partnership with Naturtejo Geopark. As always, the "Gold from Portas de Almourão" activity is the most popular in our region and, once again, it was filled with lively and curious participants. Marta Palhim and Miguel Manso, monitors from the Living Science Forest Centre, ran two editions of the activity, which recreates the ancient techniques of gold mining in the region. As gold diggers, all the participants were thrilled to see the gold picks glittering in their pannings.



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**August 10th – Boulders Trail in a hot Summer morning.** In the splendour of a hot summer morning, Monsanto Boulders Trail captivated a group of adventurers and onlookers searching for unique landscapes for another Living Science in the Summer event with Joana Rodrigues and Marta Palhim. The participants, from various parts of the country, explored the stories carved into the granite rocks by the erosion of time.



**August 10th – Ichnological Park of Penha Garcia with Living Science in the Summer.** A curious and excited group about natural history embarked on yet another Living Science in the Summer activity in the Geopark. With the warm, radiant sun as their constant companion, participants discovered the rocks of the Ponsul Valley and the fossils that tell stories millions of years old, with Joana Rodrigues and Marta Palhim. The activity ended, of course, with a dip in Pego at Penha Garcia.



**August 12th and 18th – Secrets of the Almourão Valley with Science and Art.** Summer is the perfect season to explore the world of science, which is why the 'Secrets of the Almourão Valley' walk took participants back in time through the geological remains of Talhadas Mountain. Although the mountain had been affected by a major fire a few days earlier, participants wanted to learn more about the Earth's history in Portas de Almourão region, with Marta Palhim from the Living Science Forest Centre. For the more adventurous, the second edition included a riverside walk along the banks of the Ocreza, through the work 'Menina dos Medos' (Girl of Fears), from the Cortiçada Art Fest, by Cruz do Alto.



**August 20th to 22nd - In the revalidation of the TERRA.Vita Geopark, Germany.** TERRA.vita Geopark in Germany joined the European Geoparks Network in 2001. The entire area of the Geopark has been classified as a Nature Park since 1962. The revalidation mission included various projects carried out over the last four years, such as the new exhibition at the Schölerberg Museum, the new interpretation centre on soil, the new rehabilitation project and trail in a quarry, maintenance and consolidation works at a palaeontological site, and the renovation of the network of hiking and mountain biking trails, among others. Joana Rodrigues was part of the team of evaluators, along with Alexandru Andrasanu, from the University of Bucharest and Geopark Hateg Country (Romania).



**August 23rd to 25th - In the revalidation of the Vulkaneifel Geopark, Germany.** Vulkanefiel Geopark in Germany is one of the four pioneering Geoparks, founder of the European Geoparks Network in 2000, which later gave rise to the Global Geoparks Network and the UNESCO Global Geopark designation. Since the 1990s, the territory has been committed to conserving and promoting its geological heritage. In 2022, the Ulmener Maar geosite was included in the list of the First 100 IUGS Geological Heritage Sites, and witnesses the youngest volcano in Central Europe, with its most recent eruption around 10,900 years ago. Joana Rodrigues took part in the team to revalidate the UNESCO Global Geopark seal, with Alexandru Andrasanu, from the University of Bucharest and Geopark Hateg Country (Romania).



**August 31st - Orvalho GeoTrail with Living Science in the Summer.** We ended August with another Living Science in the Summer activity, through the Biodiversity and Geodiversity Orvalho GeoTrail. Armed with field guides, cameras and multimedia identification apps, participants walked through Muradal Mountain, along the Orvalho Footbridges that took them to the Fraga da Água d'Alta waterfall, the Fragosas Valley and the remains of the old forest. The group experienced some exciting moments when a frog, which the group had been watching intently, suddenly jumped up and ate a dragonfly sitting next to it. A few metres further on, one of the participants rescued a butterfly that was stuck in the water and couldn't fly. It was a morning full of discoveries and strong emotions for these nature lovers!

# IMPACT OF GEOPARK IN MEDIA



## TV & Radio

August 9th ([www.radiocampanario.com](http://www.radiocampanario.com)) – Hundreds of mummified bees found at a new palaeontological site on the Odemira coastline

August 9th (Rádio Renascença) – Bees from the age of the pharaohs found mummified on the South West Coast

August 9th (Antena Livre) – Geopark: Thousands of years old bees found mummified on south-west coast

August 10th (Sic Notícias) – Thousands of years old bees found mummified on south-west coast

August 10th (Beira Baixa TV) – Bees from the age of the pharaohs found mummified on the South West Coast

August 10th (TSF) - Thousands of years old bees found mummified in Odemira

August 24th (RTP) - Bees from the Pharaohs' time found mummified on the Odemira coastline

August 31st (Rádio Cova da Beira) – Monsanto hosts “Templar Days”

## Newspapers & www

August (Raiano) - International school in the areas of agri-food and sustainability

August ([israelnoticias.com](http://israelnoticias.com)) – Mummified bees from King Solomon's time

August 3rd (Reconquista) - European students - Penha Garcia welcomes young people from seven countries

August 5th ([vozdocampo.pt](http://vozdocampo.pt)) – Bees from the age of the pharaohs found mummified on the South West Coast

August 9th (Público) - Bees from the age of the pharaohs found mummified in Alentejo

August 9th (JN) - Bees from the Pharaohs' time found mummified in Odemira

August 9th ([executivedigest.sapo.pt](http://executivedigest.sapo.pt)) – Bees from the Pharaohs' time found mummified in Odemira

August 9th ([www.artigosnoticias.com](http://www.artigosnoticias.com)) – Bees from the Pharaohs' time found mummified in Alentejo

August 9th ([headtopics.com](http://headtopics.com)) – Bees from the Pharaohs' time found mummified in Alentejo

August 9th (Noticias ao Minuto) – Thousands of years old bees found mummified on south west coast

August 9th ([tvc.sapo.pt](http://tvc.sapo.pt)) – Thousands of years old bees found mummified on south west coast

August 9th (Sábado) - Thousands of years old bees found mummified on south west coast

August 9th (Observador) - Thousands of years old bees found mummified on south west coast

August 10th (BeiraNews) - Bees from the Pharaohs' time found mummified on south west coast

# IMPACT OF GEOPARK IN MEDIA



- August 11th (ODigital.pt) – Thousands of years old bees found mummified in Alentejo
- August 14th (sinalaberto.pt) – Mummified bees from the time of the pharaohs found in Alentejo
- August 15th (www.passear.com) – Destination Beira Baixa (II): Castelo Branco
- August 15th (www.passear.com) – Bees from the Pharaohs' time found mummified on south west coast
- August 20th (The New York Times) – These Bees Have Been Mummified in Their Cocoons for 3,000 Years
- August 20th (urgente.24.com) – Incredible science: Fossilised insects from 3,000 years ago
- August 22nd (ciencias.ulisboa.pt) – Bees from the time of the pharaohs found mummified on the South West Coast
- August 23rd (www.daswetter.com/) – Exciting discovery: Mummified bees found in Portugal!
- August 24th (www.msn.com/pt) - Bees from the time of the pharaohs found mummified on the Odemira coastline
- August 24th (https://revistagalileu.globo.com/) – Rare mummified bees 3,000 years ago intrigue scientists in Portugal
- August 24th (EurekaAlert.org) – Bees from the time of the pharaohs found mummified on the Southwest Coast of Portugal
- August 24th (Labrujulaverde.com) – Pharaoh-era bees found mummified on the southwest coast of Portugal
- August 24th (Jerusalem Post) – Mummified bees from time of King Solomon found off coast of Portugal
- August 24th (ULisboa.pt) – Pharaoh-era bees found mummified on the South West Coast
- August 24th (portaldojardim.com) – My gardens: Barrocal Park
- August 25th (www.umsoplaneta.globo.com) – "Unique find": scientists discover 3,000-year-old mummy bees that could point to ways of resisting climate change
- August 25th (Kompas.com) – What Does a Pharaonic Age Bee Mummy Found in Portugal Look Like?
- August 25th (www.national-geographic.pl) – Hundreds of mummified bees from the Pharaoh-era have been found in Portugal. The insects are still hidden in cocoons
- August 25th (Nature World News) – Bee Cocoons Mummified in Portugal: New Fossils Lived During Pharaoh Reign 3000 Years Ago
- August 25th (Sciencepost.fr) – These bees have been mummified in their cocoons for 3,000 years
- August 26th (Prensa Latina) - Hundreds of mummified bees found in Portugal
- August 26th (vtv.gob.ve) – Hundreds of mummified bees found in Portugal
- August 28th (Sci News) – 3,000-Year-Old Fossilized Bees Found in Portugal
- August 29th (www.livescience.com) – 3,000-year-old mummified bees are so well preserved; scientists can see the flowers the insects ate
- August 29th (BeiraNews) – Templar Days" colloquium in Monsanto on September 9th
- August 29th (Tempo.pt) – Pharaoh-era bees found mummified in Portugal

## IMPACT OF GEOPARK IN MEDIA



August 30th ([www.sciencesetavenir.fr](http://www.sciencesetavenir.fr)) – Impressive discovery of thousands of mummified bees dating back to the age of the Pharaohs

August 30th ([sciencepress.mnhn.fr](http://sciencepress.mnhn.fr)) – *Thalassinoides horizontalis* Myrow, 1995 from the Middle-Upper Ordovician shallow marine siliciclastics of Iran (Lashkerak Formation)

August 30th (<https://24.hu/tudomany>) – Bees mummified thousands of years ago Found

August 30th ([superhaber.com](http://superhaber.com)) – Mummified bees from the Pharaoh-era discovered!

August 30th ([Tempo.pt](http://Tempo.pt)) – Mummified bees from the Pharaoh-era discovered in Portugal

August 31st (Reconquista) - Colloquium in Monsanto - Museology in Templar times

August 31st ([elpaisvallenato.com](http://elpaisvallenato.com)) – Hundreds of mummified bees 3,000-Year-Old found in Portugal

August 31st ([GreekReporter.com](http://GreekReporter.com)) – 3,000-Year-Old Mummified Bees Discovered in Portugal



# SCIENTIFIC CONTRIBUTIONS FOR THE GEO PARK AND THE GEOSCIENCES



- NETO DE CARVALHO, C. & BAYET-GOLL, A. - *Thalassinoides horizontalis* Myrow, 1995 from the Middle-Upper Ordovician shallow marine siliciclastics of Iran (Lashkerak Formation). *Comptes Rendus Palevol* 22 (27): 569-583. <https://doi.org/10.5852/cr-palevol2023v22a27>

# PROMOTION FOR THE GENERAL PUBLIC

تحت الرعاية الملكية السامية لصاحب الجلالة الملك محمد السادس  
 ٥ ٢٤٤٣٣ ٢٠١١٣١١ | ٥٠٥ | ١٤٨٨٥٥ ٠٣١١٤٤٤ ٤٨٤٤٤٤ ٤٤٤٤ ٥٤٤٤  
 Under The High Patronage of His Majesty King Mohammed VI

جمعة بني ملال - خنيفرة  
 REGION BENI MELLAL - KHENIFRA

unesco  
 Global Geopark

The Global Geoparks Network, the Beni Mellal-Khenifra Regional Council  
 and the M'Goun UNESCO Global Geopark

ORGANIZE

المؤتمرات العالمية  
 ON UNESCO GLOBAL GEOPARKS

THE 10<sup>th</sup> INTERNATIONAL CONFERENCE

THEME:  
 UNESCO GLOBAL GEOPARKS  
 DEVELOPING COMMUNITIES

FROM SEPTEMBER 4<sup>th</sup> to 6<sup>th</sup> 2023 PRE-CONFERENCE  
 FROM SEPTEMBER 7<sup>th</sup> to 9<sup>th</sup> 2023 CONFERENCE  
 IN MARRAKECH  
 FROM SEPTEMBER 10<sup>th</sup> to 11<sup>th</sup> 2023  
 IN BENI MELLAL AND AZILAL

“DIAS TEMPLÁRIOS”  
 MONSANTO | 9 SETEMBRO '23

PROGRAMA  
 BALUARTE | JUNTO À IGREJA MATRIZ

12H00 - HASTEAR DA BANDEIRA  
 Abertura do Acampamento Militar

DURANTE O DIA  
 Esgrima histórica | Arco e besta históricos | Artes e ofícios | Danças medievais

13H30 - À CONVERSA COM...  
 Museologia nos dias de hoje

Abertura:  
 ARMINDO JACINTO | Presidente Câmara Municipal Idanha-a-Nova  
 MANUELA CATANA | Geopark Naturtejo Mundial da UNESCO / Município Idanha-a-Nova  
 AIDA RECHENA | Diretora Museu Nacional Resistência e Liberdade  
 MANUEL FURTADO MENDES | Diretor Museu Ordem dos Templários (MOT)  
 JOSÉ MANUEL ANES | Antropólogo, Grão Mestre OPCT

18H00 - ARREAR DA BANDEIRA  
 Encerramento do Acampamento Militar

DURANTE O EVENTO:  
 - Romaria do Nossa Senhora da Azenha  
 - Mercado da Bio-Região vai a Monsanto (a partir das 10H00, Posto de Turismo)  
 - Visita Livre: Geopark Naturtejo Mundial da UNESCO

CIÊNCIA VIVA NO VERÃO

ATIVIDADES - SETEMBRO

04/09 - D. CASSANDRA, A TIGELADA E A ABELHA MAIA (FIGUEIRA, PROENÇA-A-NOVA)

05/09 - OS SEGREDOS DO VALE DO ALMOURÃO (SOBRAL FERNANDO, PROENÇA-A-NOVA)

06/09 - À PROCURA DA BIODIVERSIDADE NA RIBEIRA DO ALVITO (CASALINHO, PROENÇA-A-NOVA)

INSCRIÇÃO GRATUITA, MAS OBRIGATÓRIA EM [HTTPS://WWW.CIENCIAVIVA.PT/VERAO/2023/](https://www.cienciaviva.pt/verao/2023/)

CENTRO CIÊNCIA VIVA DA FLORESTA  
 CIRCUITOS CIÊNCIA VIVA  
 REDE DE CENTROS  
 CIÊNCIA VIVA  
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 naturtejo  
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## PROMOTION FOR THE GENERAL PUBLIC

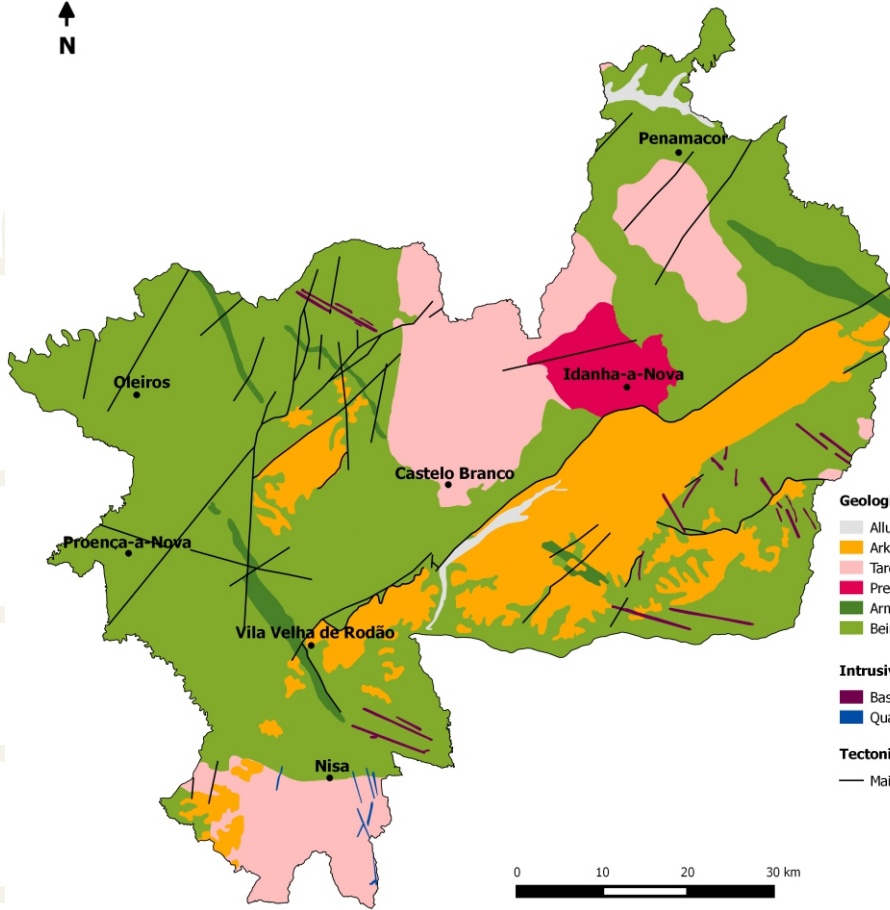


**Mercado Bio-Região**  
IDANHA·A·NOVA  
SÁBADOS  
DAS 08H00 ÀS 12H00  
MERCADO MUNICIPAL  
(PRAÇA)

Logos at the bottom: Município de Idanha-a-Nova, Mercado Bio-Região, BIOECO, UNESCO, idanha.pt, and other partner logos.

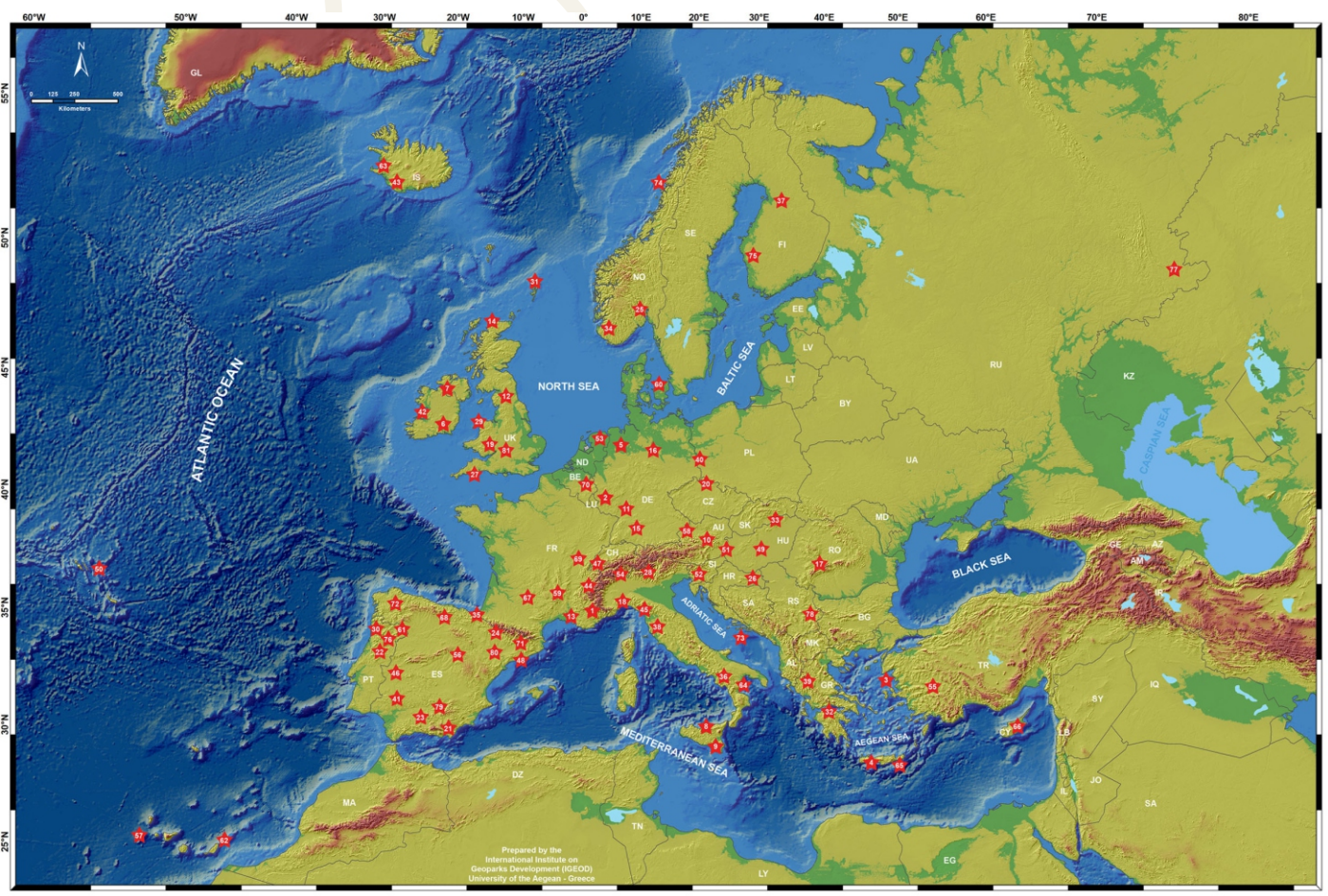
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- Geological Formations (Ma-Million years)**
- █ Alluvium and fluvial terraces - Plistocene-Holocene (1Ma-present)
  - █ Arkoses, breccias and conglomerates - Eocene-Pliocene (50-2.6Ma)
  - █ Tardi-Variscan orogenic granites (315-300Ma)
  - █ Pre-Variscan 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





Edition - **Geopark Naturtejo, 2023**  
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Design - **Layer [Design and Print Studio]**  
Translation - **Carla Jacinto**  
Production - **Joana Rodrigues**



# CRUZIANA

GEOPARK NATURTEJO DA MESETA MERIDIONAL EUROPEAN AND GLOBAL GEOPARK MONTHLY REPORT

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

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

