Cooperation between UNESCO Global Geoparks Bergstrasse-Odenwald (Germany), Lesvos Island (Greece) and UNESCO WHS Messel Pit:

Understanding Climate Change. Exploring the consequences in the geological record of the Petrified Forest of Lesvos.

The joint exhibition, which was opened in July 2021, was initiated and organised by the UNESCO Global Geoparks Bergstrasse-Odenwald (Germany) and Lesvos Island (Greece), in cooperation with the UNESCO World Heritage Site Messel Pit. Visitors to the exhibition experience how Lesvos Island changed dramatically after the Vatousa volcanic eruption 19 million years ago. This covered the area in volcanic ash, burying and preserving a now fossilized subtropical forest ecosystem. Millions of years later, these witnesses to a catastrophe, especially numerous lithified tree trunks in life position, allow us to reconstruct the living world of that time and provide clues about the consequences of climate change in the Earth’s history. Learning about the reasons for and consequences of climate change in the past helps us to understand how the Earth functions and how essential it is, to unite all efforts to address climate change in order to secure a habitable future for our planet. The exhibition in the WHS Visitor Centre is open until 20th May 2022.

Apuan Alps UNESCO Global Geopark (Italy):

“protected” water in glass bottles!

As karst mountains, the Apuan Alps have an unbreakable bond with water. Thanks to the close relationships between water springs and karst cavities, in the 1700s the theory on the underground water cycle has been developed here, in the Apuan Alps. Globally, the effects of climate change are making water increasingly scarce and therefore precious. To raise awareness of local communities and visitors about water as the most important resource on our planet, the Geopark launched a project to supply glass bottles for water to those restaurants and accommodation facilities awarded with the quality certification for their eco-compatible practices within the European Charter for Sustainable Tourism (ECST). The aim of this project is to promote drinking water from springs within the protected area, reducing plastic, waste and the pollution generated by bottles carried in from other territories.

Burren & Cliffs of Moher UNESCO Global Geopark (Ireland): creating new promotion and management tool

“While international tourism in The Burren & Cliffs of Moher UNESCO Global Geopark was much reduced throughout the COVID-19 pandemic, the Irish market has been strong, and the Irish people have created wonderful online presentations of their exploration of the Geopark. Online marketing and booking systems have become much stronger and are influential tools for use in developing sustainable tourism opportunities. The online booking systems were initially created initially to manage social distancing measures, and over time, these booking systems will provide insights on visitor numbers and choices as well as an effective method for visitor management in the Geopark.
Djerdap UNESCO Global Geopark (Serbia): Illuminating Stone
Djerdap UGGp hosted the exhibition “Illuminating Stone” organised by Prof. Dr. Kristina Šarić (Faculty of Mining and Geology, University of Belgrade), and associates Dr. Adrien Feix (Austrian Cultural Forum Belgrade) and Prof. Dr. Hans-Jürgen Gawlick (University of Leoben, Austria). When thin slices of a stone cut in a diamond saw are polished to just a few hundredths of a millimetre thick, the stone becomes transparent and comes to life when viewed with a petrographic microscope in unpolarized and plane polarized light. The optical properties of the crystals of different minerals, including colour, colour intensity shape and cleavage patterns which appear as straight lines, reveal the stone's mysterious beauty in a complex pattern of colours. Photomicrographs of stones in thin section don't just provide information about geology; they are also worth seeing as natural works of art.

Estrela UNESCO Global Geopark (Portugal): ObservaEstrela 2021
The Estrela UGGp promoted the 3rd event of the ObservaEstrela Festival, between the 17th and 25th of September. Due to the limitations imposed by the pandemic, a mixed format was adopted for this year, with a wide range of activities, from workshops, masterclasses, field trips, educational activities and photo exhibitions. This nature and landscape festival is an extraordinary opportunity to promote and involve communities and visitors in the heritage of the Estrela Geopark. The programme during this 3rd event also celebrated World Clean Up Day, with clean-up activities taking place in some areas of the Geopark. More than a festival, the ObservaEstrela is an opportunity to raise awareness and interpret the value of the resources of this Mountain!

Famenne-Ardenne UNESCO Global Geopark
The promotion of the Geopark is based on the implementation of good environmental practices through our tourism products. Actions promoting slow tourism and soft mobility are therefore a priority, reducing as much as possible the effects on the environment. In collaboration with the Asbl Les Sentier de Grande randonnée, a new edition has been published: "Tour de la Famenne, à la découverte du Geopark Famenne-Ardenne". This 198 km long hike is completed in several stages and passes through many of our geosites. It also promotes our partners because walkers are invited to experience our local producers, accommodation providers and tourist attractions.

Forum of UNESCO Global Geoparks in Germany: International cooperation and exchange across the countries and continents.
The forum of seven UGGPs (Bergstrasse-Odenwald, Harz-Braunschweigerland-Ostfalen, Inselsberg Drei Gleichen, Muska Arch, Swabian Alb, TerraVita, Vulkaneifel and one applicant (Ries) as well as two individuals (Marie-Luise Frey, GGN executive Board, and Joachim Felix Leonhard, chair) meets regularly two to three times per year. During the pandemic, the meetings were held digitally, and recently, the first face to face meeting took place at WHS Messel Pit (Bergstrasse-Odenwald). Together with the invited guests Nickolas Zouros (Lesvos, GGN) and Marleen Meissner (German Commission for UNESCO), the members discussed options for international collaboration and exchange. Inspired by the presentation of international cooperative projects Geopark, a joint thematic exhibition consisting of different modules was agreed to be developed in the form of a workshop in cooperation with the German Commission for UNESCO. The exhibition can be a communication and exchange tool for Geopark Forums in Europe and also worldwide.
Katla UNESCO Global Geopark (Iceland): Using the time to prepare for the future
Katla Geopark, in association with the Icelandic Directorate of Labour, held an online seminar last spring for English speaking people who lost their jobs in tourism due to the Covid-19 pandemic. The aim of the seminar was to increase the knowledge of the attendees about the geology, nature, and history within the Geopark, thereby increasing their opportunity to get jobs in tourism once the pandemic is over and improve the quality of information about the Geopark provided for tourists. The seminar lasted six days, two hours at a time, with several experts from partner agencies lecturing about different subjects.

Harz-Braunschweigerland-Ostfalen UNESCO Global Geopark (Germany): Theme day „Future Concept: Sustainable Water Management“
With our theme day "Future Concept: Sustainable Water Management" on September 4, we drew attention to the importance of water as a resource which stimulated a round of discussions with various stakeholders and laid a foundation for further projects. On September 4, 2021, we held a theme day with speakers with a variety of expertise on the topic of "Future Concept: Sustainable Water Management". This is a first attempt to address the important topic of "water" and to plan further projects. Through the information event, various stakeholders came together and got talking: farmers, a district administrator, an environment minister and private individuals. In this way, we initiated a discussion about the vital resource and the effects of climate change on the supply of drinking water.

The Granada UNESCO Global Geopark (Spain) celebrates its first Global Photography contest
In this first event, in the format of a "Photographic Challenge", the theme chosen is Ecotourism. The objective is to show the richness of the landscape, its cultural diversity and highlight the human factor integrated into the natural environment. Ecotourism is one of the most important fields of work for the coming years. The Granada Geopark has one of the best continental sediment and fossil records of the last five million years of the Earth's history, especially from the Quaternary period, it represents one of the landscapes least altered by human activities in Europe. This makes it a spectacular set for photography.

Gea Norvegica UNESCO Global Geopark (Norway): Adapting teaching activities during the pandemic
Our geopark sites have a central role in our communication work with schools, and in normal circumstances we happily provide guided tours for schoolchildren in these beautiful surroundings. But during the pandemic, with transport and travel restrictions, we had to think differently. Together with the local science centre DuVerden, Gea Norvegica UNESCO Global Geopark created a programme called "Geologist and Scientist for a day", where we mapped all the interesting geological and biological features that surrounded the schools, and provided a day in the field followed by lab work for each and every school. In this way we brought the geopark-sites to the schoolchildren and obeyed all restrictions, with great success!
**Origens UNESCO Global Geopark (Spain): A web portal to showcase the Pedrera de Meià geoheritage**

TheOrigensUGGphasreleasedthewebportalhttps://pedrarademeia.geoparcorigens.cat to showcase the exceptional Lower Cretaceous fossil record in la Pedrera de Meià. These outcrops, characterised as Konservat-Lagerstätten, present extraordinary fossil preservation including soft parts and rare fossilized colour patterns. The site has been visited by scientists around the globe since late 1800s and today there are over 8,000 fossils, of which 114 are holotypes, catalogued and located in twelve European museums. The web portal will act as a digital repository of images and descriptions and a source of information at all levels: scientific, educational and touristic.

**Magma UNESCO Global Geopark (Norway): The GEOfood initiative**

TheGEOfoodinitiativebyMagmaGeopark,inNorway,hasbeenpromotedinUNESCOGlobalGeoparks since2015. Created within the framework of the UNESCO Global Geoparks values and bottom-up approach, theGEOfoodinitiativeaimstovalorizethe production of local food and sustainable practices within the local population in geoparks. During the Covid-19 pandemic the need for local food and the valorization of local raw material became even more crucial, due to the difficulties in commercial trading. Several UNESCO Global Geoparks which adopted theGEOfoodbrand andMANIFESTOactivateddistinctiveactionsforincreasingthe relationships between local producers and local inhabitants within the spirit of common solidarity which has characterised the membership, since the beginning of the European Geoparks Network. TheGEOfoodinitiative, with the promotion of local traditional food, also contributes to healthy, more environmentally sustainable diets based on local products, increasing the inhabitants resilience towards natural disaster related events, such as Covid-19.

**Maestrazgo UNESCO Global Geopark (Spain): Geo-Solidarity, together we transform the Geopark**

The Maestral, a mountain race, was developed and included as an event within the framework of the 16th Maestrazgo UGGp EGN Week 2021. In this event we go out into the natural and pleasant environment within the boundaries of a globally significant geosite, follow marked trails, learn about geology and its links with other aspects of the natural and cultural heritage and promote regional geotourism. Contributions from the participants were donated to PHEIPAS, an association that promotes research into and the treatment of some rare diseases. This is a daytime event with the aim of connecting visitors with a specific but global perspective, the planet we all call home.

**Green Recovery in the North Pennines UNESCO Global Geopark (UK)**

In the North Pennines AONBand UNESCO Global Geopark, new approaches and collaborations support the recovery for people and nature in our vital upland landscapes. One example of this is the High Helbeck project, a unique programme working with a private estate and Non-Government Organisations (NGOs) to transform the estate’s management to support wildlife and improve habitats, reduce flood risk and increase carbon storage. The project also involved engaging with local people and other landowners. This project was made possible through the Green Recovery Challenge Fund, a UK Government scheme to support a greener future.
TERRA.vita UNESCO Global Geopark (Germany): The Dinosaur Rally in Barkhausen

The dinosaur tracks of Bad Essen-Barkhausen are celebrating the 100-year anniversary of their discovery, but a planned major event could not take place for two reasons: (1) The Covid-19 pandemic and (2) a hidden escaped dinosaur. Fortunately, the dinosaur left all sorts of puzzles along the TERRA.track hiking trail "Megalosaurus" that lead to its scientific name. To solve the puzzles, the Geopark asks all dinosaur fans for help. In addition to finding out the dinosaur's name, the rally can only be completed successfully, if a self-painted dinosaur picture is sent to TERRA.vita. The Geopark will recognize the participants as "dinosaur experts" by issuing an identity card and a badge. All submitted pictures are published on social media and the ten most gift from the Bad Essen Tourist Information Office. The rally was developed in cooperation with the Experiential Pedagogical Country Hostel Barkhausen and can be carried out from mid-August to the end of October.

Dive into Saimaa UNESCO Global Geopark (Finland) with added reality

Saimaa UNESCO Global Geopark launched the AR-trip, which includes 3D-solutions, video materials and audio narration. The added reality content is opened via a mobile device and AR-app, and it gets fed from the existing signs. The AR-trip takes the user to see what it was like 11,000 years ago and includes a connection to the UNESCO Global Geoparks Network. The AR content package is also available to entrepreneurs and will make it easier for them to tell customers what Saimaa Geopark is all about. The AR-trip was designed with Salmi Platform Oy.

Swabian Alb UNESCO Global Geopark (Germany): Promoting geodiversity

The Covid-19 pandemic was a challenge for the world. Most people were restricted in their travels and, thus, chose to explore their local area. However, this was a chance for the UGGp Swabian Alb to promote its new "Entdeckerkarte", which contains all the Geopark's Geopoints and Infocentres and combines tourism and education. The map is a chance to discover the geodiversity of the Swabian Alb and learn more about the natural and cultural landscapes of the region, which are shaped by Jurassic sediments, karst processes, volcanism, an impact crater, and the ice age.

Styrian Eisenwurzen UNESCO Global Geopark (Austria): Renovation work in the GeoVillage

This year was used for important renovation work in the GeoVillage. Thus, once again parts of the footbridge in the Nothklamm could be renovated. At the same time, the content of the "GeoPfad" theme trail was updated and brought up to the latest standards. Now 15 stations on an entertaining circuit convey exciting geological highlights from the GeoDorf Gams and the only UNESCO Global Geopark in Styria. The Nature and Geopark Styrian Eisenwurzen and the Natural History Museum Vienna are responsible for the content of the new GeoPath. In cooperation with the municipality of Landl as well as the culture and tourism association of Gams, further awareness-raising measures will be promoted in the coming years.

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Recreation in nature for All in Vulkaneifel UNESCO Global Geopark

The Eifel is one of ten German vacation regions and cities that joined forces in 2008 to form the Barrier-Free Destinations Working Group in Germany. Together, they are pioneering the development of travel offers for people with limited mobility, with hearing, visual and learning disabilities, for the deaf and blind, as well as for families and senior citizens. The UNESCO Global Geopark Vulkaneifel has also been a model region for barrier-free tourism since 2017. Currently, more than half of the surveyed establishments and excursion destinations for “Travel for All” in the entire Eifel are located within the UNESCO Global Geopark Vulkaneifel. The Geopark offers a wide range of services for guests with handicaps. At present, 28 establishments are successfully certified „barrier-free accessible“. From the tourist information as the first point of contact for guests to individual accommodation and excursion destinations, all possibilities are given to experience one’s vacation with a handicap in Vulkaneifel.