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## Hondsrugpeith at De Hondsrug UNESCO Global Geoparts is Hilting Route of the Year 2022

De Hondsrug UNESCO Global Geopark, Netherlands

During the online 'Kick-off of the new cycling and walking season', the Hondsrugpad at De Hondsrug UNESCO Global Geopark was proclaimed Walking Route of the Year 2022. The online event was an initiative of the Cycling and Rambling Fair and took place on 9 April on Hicleholidays.com, the site with the offer of active holidays.

The route was chosen from a shortlist of five titles that were still in the race for the trophy for the 'best walking route of the Benelux'. The other nominees were the Biesboschpad (Netherlands), Dutch Mountain Trail (Netherlands), La Lesse et La Lomme par les GR (Belgium) and Ons Kloosterpad (Netherlands).

#### Connection between geoparks

The Hondsrugpad (166 km) is the Dutch part of the INTERREG project Hondsrugpad-Hünenweg (325 km) that connects the De Hondsrug and TERRA. Vita Geoparks (Germany). It runs from Groningen to Meppen, just across the

## Geo Tourism



German border, and from there to Osnabrück. The route runs along old paths, through vast forests, heathland, sand drifts and farmland, past esdorpen and hunebedden, the 5000 year old witnesses of the former inhabitants. It also traverses the impressive cross-border peat bog that shows how Drenthe looked in prehistoric times.

### Motivation of the jury

Due to the perfect signposting, the great variety of landscapes along the route, the concise route description (in the form of a route guide), the large proportion of unpaved paths and the balanced mix of nature and culture, the jury has decided to select the Hondsrugpad as this year's winner.

### **Cycling and Rambling Fair Award**

The election of the Walking Route of the Year is an initiative of the Cycling and Rambling Fair, which aims to stimulate the creation of high-quality routes. In 2022, as in 2021, the physical fair in Ghent and Utrecht could not take place due to the corona pandemic. As an alternative, the organisation opted for an online Kick-off with a programme of lectures, master classes and the presentation of the awards for Wandelroute and Bicycle Route of the Year.

De Hondsrug UGGp, Netherlands



## Geo Tourism

# **S**pring Flowers in Shilin UGGp Fascinate Visitors

#### Shilin UNESCO Global Geopark, China

Shilin is becoming a world of flowers and the fragrance of various blossoms fill the air as spring approaches.

With favorable weather conditions and a unique ecological environment, all kinds of flowers covering peach blossoms, pear flowers, magnolia flowers, rapeseed flowers, cherry blossoms, begonia flowers, apricot flowers, verbena flowers, etc. are in full bloom every spring, adding a gorgeous pastoral scenery to the karst landform of the Shilin UGGp.

When the spring breeze blows,

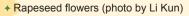


blooming rapeseed flowers in the Naigu Stone Forest of the Shilin UGGp, undulate like yellow waves, creating a sea of gold, and exude pleasant scents, mixing with the smell of the earth.

The pink peach blossoms and the white pear blossoms are dotted all over the mountains and fields within the Shilin Geopark. Under a pear tree with bright white flowers, visitors can feel pieces of petals flutter down their heads, shoulders and feet when they are blown off the tree by warm spring wind. Light and dark gray limestone pillars



+ Cherry blossoms (photo by Wang Limei)





+ The golden sea of rapeseed flowers (photo by Li Kun)

and columns, unparalleled geoheritage of the Shilin UGGp, stand in a sharp contrast with the flowers, trees and hills.

Thousands of cherry blossoms in the Major Stone Forest, the most well-known area of the Shilin UGGp, attracts hordes of visitors. The pink flowers against the backdrop of green hills and blue waters create a gorgeous fairyland. Strolling along the trails

Local folk art

performance under the begonia flowers

flanked by cherry blossoms and enjoying a laid-back moment is a charming choice.

Flower tours have become an increasingly popular option for people. While enjoying the flora and fauna, tourists can take part in dozens of programs and activities, such as admiring local folk art exhibits, watching folk art performances, tasting local foods, dressing up in traditional clothing, picking vegetables and fruits, going camping, learning about farming.

Come for a hike and record the lovely spring scene in the Shilin UGGp. What an idyllic scene to escape the hustle and bustle of the city.

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Begonia flowers(photo by Wang Limei)

Purple sea of verbena(photo by Wang Limei)

Geo Tourism

## **NWH GGD** Takes on the Clachtoll Ranger Hut – A Focal Point for A Remarkable Area of Geology, Nature and History

North West Highlands UNESCO Global Geopark, United Kingdom of Great Britain

In 2021, the North West Highlands UNESCO Global Geopark was asked to take on the lease and long term management of a new Ranger Hut for Clachtoll in Coigach.

The original Ranger Hut was a perfectly situated meeting point for the activities of the local Countryside Ranger. It had been a focal point for many years for the thousands of visitors to the beautiful beach at Clachtoll. However, a new hut was needed to house a larger display area. This would include a wider and more in-depth range of information about the area's natural and cultural heritage.

Following a hugely successful excavation of an Iron Age broch at Clachtoll, there was a wealth of new information to be shared with locals and visitors. The Clachtoll

> Clachtoll Beach, Coigach, North West Highlands UNESCO Global Geopark. Credit: VisitScotland, Airborne Lens

## Geo Tourism



+ Inside the Clachtoll Broch

+ CrossCut Coop construction team in front of the new Clachtoll Ranger Hut

Broch is a 2000-year old drystone tower that once housed an Iron Age farming family. Brochs are a type of tower unique to Scotland – particularly the Atlantic North and West. The Clachtoll Broch suffered a major fire and was abandoned by the family that lived there. But the fallen and burnt rubble created a cover that preserved the objects and structural features inside.

Alongside telling the story of the Clachtoll Broch, the hut's new interpretation boards will include maps and information about the rich flora, fauna and geology of Clachtoll and Coigach. The Geopark provided information about the geology and also the soils of the area. This includes new research undertaken by our Geopark Manager and Geoarchaelogist Dr Laura Hamlet. Laura worked together with the University of Stirling, plus students from nearby Ullapool High School, to research the area's soil fertility. We hope the new interpretation will help visitors to better understand what they can see in the landscape around them – not only geologically, but also how people have cultivated and lived off the land historically.

Construction of the new hut commenced in March 2022. This was undertaken by CrossCut Coop - a Scottish co-operative that focuses on sustainable, ecological and community-led building projects. The building was completed in April and the hut officially opens to the public on May 21st 2022. We hope the new Ranger Hut will continue to be a focal point for locals and the growing numbers of visitors to our area.

The Clachtoll Ranger Hut, along with the research project into the soils of Coigach and Assynt, were both part of the 'Coigach and Assynt Living Landscape' community partnership – a project aiming to deliver a variety of environmental and economically beneficial projects for the Coigach and Assynt regions of North West Scotland.

Alison MacPherson

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### Management and Geo-Conservation



Taining UNESCO Global Geopark, China

Recently, Taining UNESCO Global Geopark was selected among Fujian's top 10 typical cases of the "Two Mountains" Theory (lucid waters and lush mountains are invaluable assets).

President Xi Jinping conveyed his care to Taining during his visit in 1997, 1999 and 2002 and issued instructions including "lucid waters and lush mountains are invaluable assets",

"mountainous areas should make the best of mountain and water resources", "protect the environment well", and so on. Over the years, Taining has born in mind the expectations of President Xi. Under the guidance of the Two Mountains Theory, we have achieved a good performance in the protection, utilization and management of Taining Global Geopark, enhanced the ecological

conservation and promoted the sustainable development of this region.

First, we optimized the management system for geological and ecological protection. In the past few years, over 10 local regulations were issued, more than 20 overall plans and detailed plans were made, and the No.1 proposal of creating a friendly ecological environment was approved.



Geopark Staff to hang traps for pinewood nematode prevention and control



Students have a study tour in Taining UGGp

We also established a "1+N" comprehensive law enforcement mechanism for resources protection, and effectively managed the mountains, waters and villages by using smart supervision. By taking these efforts, our geodiversity and biodiversity are under well protection.

Second, we increased our investment in geopark management. We have invested over 300 million yuan in the protection and management of protected areas, and implemented 11 ecosystem protection and restoration projects involving mountains, rivers, forests, farmland, lakes, grasslands and deserts. The parallel growth of ecological conservation and fiscal revenue were achieved.

Third, we strengthened the publicity and popular science

+ Jiulong Pool, a scenic spot with the first national immersion water canyon night tour

education. Various activities to popularize geological science have been carried out in scenic area, community, and on campus. The visibility of Taining Geopark was promoted.

Tourism of Taining has enter a phase of fast development. The number of visitors has exceeded 4 million, 5 million and 6 million in succession. The tertiary industry output dominated by tourism contributes more than one third of the county's GDP, the tourism revenue accounts for a quarter of the net income of rural residents, and the tourism service providers account for one fifth of the county's total labor force.

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### Management and Geo-Conservation

## nvironmental Efforts Make Endangered Ottelia Acuminata Survive in the Shilin UGGp

#### Shilin UNESCO Global Geopark, China

The Changhu Lake of the Shilin UGGp in southwestern China's Yunnan Province became even more beautiful recently as a large number of *ottelia acuminata*, an endangered aquatic plant that is only surviving in China, swayed in the crystal clear water and the flowers floated on the surface. Many tourists and local residents can be seen arriving every day at the Changhu Lake to enjoy the flowers rippling with the waves.

This aquatic plant requires



Ottelia acuminata rippling in the Changhu Lake of the Shilin UGGp

harsh growth conditions, and is very sensitive to water quality and will die easily if the water is polluted. Its growth will be affected even if the water is only lightly polluted, or if fertilizer has run into the lake from farmland. So the plant has been dubbed by the ecologists as the "vane" or "touchstone" of water quality. It showed that the water quality and ecological conditions are highgrade when ottelia acuminata is seen blooming on the water surface. Due to ceaseless environmental efforts, this special plant still survives in Shilin.

As a rare and endangered plant species, *ottelia acuminata* is listed in July 1984 as Class III National Protected Plant. Southern China used to have a wider distribution of this plant,

 Ottelia acuminata surviving in the Changhu Lake of the Shilin UGGp

especially in Yunnan Province, but the distribution has gradually decreased due to pollution and

water contamination.



 Ottelia acuminata floating in the Changhu Lake of the Shilin UGGp

Local authorities of Shilin County are always sparing no efforts to contain pollution and shaping a balanced ecological system especially within the northern part of Shilin Geopark area, which is the water source of Shilin County. Thanks to years of big concern, the water quality in Shilin County meets the standard

of Class II, the second-best level in the country's five-tier quality system for surface water. Since two decades ag o, the water quality of Shilin County ranked first in Kunming, the capital city of Yunnan Province, and the rating has maintained till now. Shilin UGGp is trying to offer visitors and residents an ecological Geopark and contributing to ecological civilization.

> Bao Jihong Shilin UGGp, China bjh723@163.com

## A Travel Following Textbooks came to Yandangshan UNESCO Global Geopark

#### Yandangshan UNESCO Global Geopark, China

Recently, the camera crew of A Travel Following Textbooks from China Central Television (CCTV) came to Yandangshan UNESCO Global Geopark, and had a detailed coverage about the unique geological and cultural features of Yandangshan, with a document of seven episodes planned to be presented to the public in Channel Science and Education of CCTV in May.

A Travel Following Textbooks is a program featuring education by experiencing different culture in person. With clues from textbooks for elementary and secondary school students, students can read as many books



as possible while travelling a long distance, and they can have a close experience of cultural relics and natural scenery, and the liveaction introduction about history and culture can bring natural and cultural heritages existing in our vast land back to life.

The camera crew from CCTV spent about half a month collecting material in Yandangshan, with the topic of document centering on rhyolite, the travel notes of Xu Xiake (1587-1641, a geoprapher and traveler in the late Ming Dynasty) and the history of mining in Changyu-Dongtian District. Their main goal is to present audience unique geological characteristics and stories Xu Xiake explored Yandangshan from different angles.

For days, the camera crew had field trips in Lingfeng, Lingyan, Dalongqiu. While



collecting material on the spot, the storyteller, teachers and students followed the footprints left by Xu Xiake, explored the origin of Waterfall Dalongqiu and experienced changes of mountains and streams. On the back of Dalongqiu, students tried to tell difference between poems left on rock by poets from different dynasties, and feel the culture passed down through thousands of years of history. On the back of Cave Changyang, they searched and inspected "rock balls" of different size in spherical bubble rhyolite

and listened to stories told by volcanoes formed hundreds of millions of years ago.

The document is based on footprint left by Xu Xiake in Yandangshan, and gives a detailed and logical description about the geological heritage, natural ecology, custom and traditions in Yandangshan, which can be seen as a guideline for travel. With the information from CCTV, the document with the topic of Yandangshan is planned to be divided into seven episodes, and will be shown on CCTV around May Day, specifically at 6:54 pm from Monday to Friday.

Yandangshan joined the Global Geoparks Network in 2005, and it is the first geopark featuring Mesozoic volcanic landforms. The cooperation between CCTV and Yandangshan will further protection of natural resources, popularization of scientific knowledge about Earth, development of geotourism, and sustainable growth of local economy.

#### Lu Qinfei

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## eopark Education Activities in Cao Bang High School for the Gifted

#### Non nuoc Cao Bang UNESCO Global Geopark, Viet Nam

On January 10th, 2022, the "Geopark Ambassador club" and Youth Union of Cao Bang High school for the Gifted cooperated to organize a geopark propaganda session to students of the school.

There were teachers in charge of the "Geopark ambassador club", representatives of Youth Union of Cao Bang High school for the Gifted and more than 600 students from all the classes attending the propaganda session of the Club. The propaganda session was livestreamed and circulated to other students of the school from the Grade 11-Physics class.

The program included 3 parts: Part I: Briefing on the Non nuoc Cao Bang UNESCO Global Geopark; Part II: Answering multiple choice questions about the geopark (organized at each class); Park III: Online multiple choice quiz competition (with the participation of 45 students form 18 classes).

This extra-curricular session is among the periodical activities in the school year activity plan of the "Geopark ambassador club" of Cao Bang High school for the Gifted. To prepare for the club members had discussed and agreed on the general ideas, came up with detailed activities and assigned specific tasks for



Education



3 teams of the club (cultural heritage team, geological team and communication team). Due to the regulations on limiting mass gathering in the context of the Covid-19 pandemic, the Club decided to organize an extra-curricular combining digital and physical format. The program attracted attention and enthusiastic respond of students. Cao Bang High school for the Gifted is one of the first 6 schools involving in the implementation of the "Geopark ambassador club" model. Geopark education and communication of Cao Bang High school for the Gifted has been carried out regularly with various activities joined and supported by all students of the school. Through these activities, the "Geopark ambassador club" has been contributing to the popularization of Non nuoc Cao Bang Geopark to all students. Moreover, geopark education has really made a great contribution to geo-heritage conservation in Non nuoc Cao Bang Geopark.

Non nuoc Cao Bang UGGp, Viet Nam



 Ms. Nguyen Thi Le Thu, the teacher in charge of the Club explaining the rules of the online quiz competition to the students



+ A student representing his class to participate in the online quiz competition

# Nianzhushan UNESCO Global Geopark **Carries out A Series** of Science Popularization **Activities Themed "World Earth Day"**

Tianzhushan UNESCO Global Geopark, China

On April 21, Tianzhushan **UNESCO Global Geopark** carried out a series of science popularization activities to celebrate the 53rd World Earth Day with the theme of "Cherish the Earth to Achieve Harmonious Coexistence Between Man and Nature", starting a learning journey for iuveniles to protect the earth environment.

### **Interactive Environmental Protection Class**

Tianzhushan UNESCO Global Geopark organized 30 students from Tianzhushan Central Primary School to visit Tianzhushan Geopark Museum, learning about the formation process of the earth, the earth's internal structure and the geological, natural and cultural resources of Tianzhushan

UGGp. At the same time, Tianzhushan Geopark gave a lecture on garbage classification and related interactive games, letting the students fully master the knowledge of garbage classification and develop the habit of garbage classification.

Lecture Given in Wetland Park

Tianzhushan UGGp organized 20 students from Tianzhushan



+ Lecture on plants

## Education

Central Primary School to visit the science and education hall of Qianshui River National Wetland Park and listen to a popular science lecture on plant species and different leaves of plants.

#### **Science Popularization Lecture on Fossils**

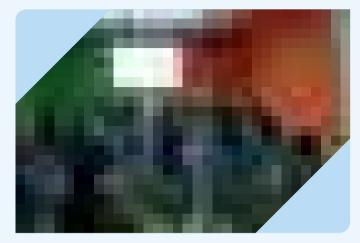
In the afternoon, volunteers of Tianzhushan Global Geopark came to Shuihou Central Primary school to give a science lecture on paleontological fossils of Tianzhushan UGGp and let the students learn about the vertebrates that once lived on this land. Interspersed with interactive questionand-answer sessions, children competed to answer all kinds of fossil knowledge questions. "Tianzhushan UNESCO Global Geopark is the paradise of living things. we love her, and we will better protect her!"

Through lectures and fun games, the significance of science popularization activities are not only to let people learn science knowledge, but also to establish ecological awareness and understand the true meaning of " Cherish the Earth to Achieve Harmonious Coexistence Between Man and Nature ".

With the continuous and in-depth implementation of the science popularization activities, the call of paying attention to nature, attaching great importance to ecology, cherishing the earth, and achieving harmonious coexistence between man and nature is getting higher and higher, which is ringing through every corner of Tianzhushan UNESCO Global Geopark.

#### HUANG Wen

Tianzhushan Geopark Administrative Center, China tzsgeopark@126.com



+ Lecture on garbage classification



Visiting Tianzhushan Geopark Museum



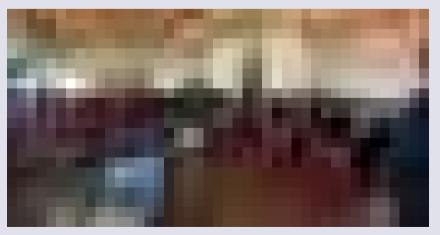
+ Lecture on fossils

## Programme of Aid to Research in Las Loras UGGp

Las Loras UNESCO Global Geopark, Spain

Scientific research is one of the fundamental pillars for the development of UNESCO Global Geoparks. Science helps us both boost the knowledge on our territories and integrate and renovate the contents and communications to be given to our local communities and visitors.

The implementation of a programme of aid to research was promoted by Las Loras Geopark in 2020, through an agreement with Entretantos Foundation with the aim of boosting scientific research within the Geopark and channelling the transfer of knowledge to local population and visitors. Projects within the scope of geology were prioritised in the first edition. The call had a financial assistance of €3,000 and three projects belonging to three different research programmes applied for it. The Geopark's Scientific Committee selected the project submitted by a research group from Vigo University, under the title



+ Talk to local population of 2022 research project

'Study and development of the Palaeobotanical record (Macro and microflora in the Jurassic and Cretaceous formations in Las Loras Geopark)'. One of the requirements to apply for the grant was that at least one talk should be given to the local population on the results of such research.

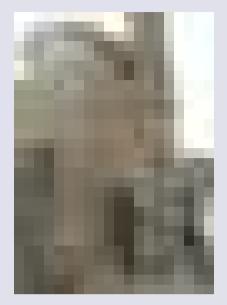
In 2021 the programme of aid was reinforced with an agreement with Gullón Biscuits, a local enterprise. Each year a grant of €4,000 will be awarded by this enterprise, in order to fund research projects, open to any scientific field and subject within the Geopark. During that edition nine projects from different places in Spain applied and the Scientific Committee selected the one by the Aqua-environmental Processes group from Basque Country University, entitled 'Lithologies used in the Valdelucio Valley-Las Loras Geopark

## Education



+ Article of Biology in 2022

churches'. At the same time, the provincial Councils of Burgos and Palencia signed various agreements with the Department of Geology of the University of Salamanca, which made available €3,000 each, thus allowing the department to present research projects on geology framed within the Geopark and that may favour and boost the participation of young researchers. Three projects were selected in this edition 'Geomorphological and hydrogeological study of Las Tuerces Karst and the Moorland of Valdivia': 'Risk analysis of rockslide by means of conventional study methods and RPAs photogrammetry; Implementation in Horadada Canyon'; and 'Las Loras Geopark as an example of community



+ Field trip: rocks and churches

vulnerability in case of geological risk'.

The Geopark's research programme has now a financial budget of €13,000 and from the beginning of this year (2022) important results have been achieved in what concerns palaeontology (the first record of a dragonfly in Spain), geomorphology, hydrogeology and the knowledge about the rocks which form the Romanesque churches within the territory. The projects are strongly committed to disseminating results to the population through talks, exhibitions, fieldtrips, workshops and articles, among others.

> Karmah Salman Monte José Ángel Sánchez Fabián Las Loras UGGp, Spain geoloras@gmail.com





# Leiqiong Celebrates the 3rd APGN Week and the 53rd World Earth Day

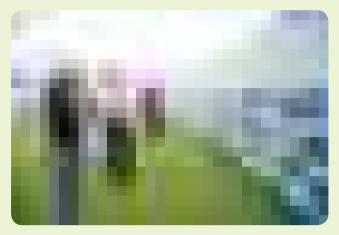
Leiqiong UNESCO Global Geopark, China

The theme of 53rd World Earth Day 2022, which fell on April 22, was "Cherish the Earth, Man and Nature Coexist Harmoniously." In order to better popularize geoknowledge to the general public, guide the social public to establish the ecological civilization concept of "respecting nature, conforming to nature and protecting nature", highlight the splendor of geoparks, promote the public's understanding of geoparks, and further promote the mutual exhibition and interaction between sister geoparks, Leiqiong UGGp celebrated the 3rd APGN Week and the 53rd World Earth Day from April 18 to 28 with 21 global geoparks including Danxiashan UGGp, Yandangshan UGGp and Taishan UGGp. For purpose of promoting the World Earth Day and strengthening the communication and tourism promotion between sister geoparks, Leiqiong held a series of wonderful activities, including the opening ceremony of the World Earth Day, sister geoparks online and offline photography exhibition, geological rock specimen

## Education



+ Visitors are attending the activity of "Cheer for the Mother Earth"



+ Visitors are watching the photography exhibition

exhibition, low-carbon and green hiking, "Cheer for the Mother Earth" award-winning activity, online science knowledge contests, popular science activity in campus, the 6th "Most Beautiful Mark of the Earth" activity, geopark live streaming lectures, virtual tours of geoparks, activity for increasing follower number of Leigiong WeChat official account.

During the event, Leiqiong further strengthened the "World Earth Day" themed publicity and popular science work through ways of distributing promotional materials, displaying promotional videos and slogans, news media reports, online media publicity,etc.

Through a series of activities of various forms and rich contents, the geo-knowledge has been

popularized to the general public, especially the teenager. The ecological civilization concept of "harmony between man and nature" has been guided by the public. The green, low-carbon, energy-saving and environmental protection production and life style has been advocated. Leiqiong has contributed to the construction of ecological civilization.

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Opening ceremony

## Science Popularization and Publicity Activities for 2022 World Earth Day in Funiushan UGGp

Funiushan UNESCO Global Geopark, China

In order to celebrate the 53rd World Earth Day, advocate the general public to pay attention to climate change, care for the earth, and understand the development concept of "lucid waters and lush mountains are invaluable assets", from April 18 to April 22, 2022, the administration bureau of Nanyang Funiushan UGGp has launched a series of science popularization and education activities with the theme of "Love for the Earth, Harmonious Coexistence between Nature and Mankind" in the kindergartens and communities of Neixiang, Xixia, Luanchuan and Songxian. The geopark bureau broadcast science popularization videos in schools and communities, hang banners across the streets, set information desk for answering questions on site and other means to call on the general public to cherish the earth and live in harmony with nature.

On April 21, during "Science Popularization Activities into School", Funiushan UGGp Management Committee carried out rich and colorful theme

Science popularization activities
into kindergarten in Neixiang

+ Science popularization activities into Nanyang No. 1 Experimental Kindergarten

### Education



Science popularization activities into communities

activities of dinosaur world in each class, shared with children of kindergartens about the origin of World Earth Day, the evolution of dinosaurs, the formation of fossils and so on. Through vivid explanations and interesting interactions, children learned much knowledge about dinosaur, which stimulated their interests in exploring nature and learning more about the earth, and gave them a preliminary understanding of the interdependence between mankind and nature. These activities nurture their love for nature and protection of the ecological environment in the hearts.

On April 22, during "Science Popularization Activities into Communities", Funiushan UGGp Management Committee carried out science popularization activities in various ways, such as publicity materials, TV programs, propaganda vehicles, display boards, propaganda banners, and on-site Q&A at the information desk. Volunteers of the geopark popularized knowledge about the evolution of the earth, the formation of geology, and the importance of protecting the environment for the community residents. We advocated the local people to establish the concept of "respecting nature, conforming to nature, and protecting nature" and practice a green and low-carbon lifestyle. According to statistics of that

day, more than 3,000 brochures were distributed, over 20 various exhibition boards displayed, over 30 banners hung, and over 500 consultations received. Taking the "April 22 World Earth Day" as an opportunity, Funiushan UGGp made use of a series of activities to contribute to the ecological environment, ecotourism, global environmental and climate governance, and joint building of a community of shared future for mankind.

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The new Geo-science Experience Center

## **Shennongjia UGGp** Launches New Nature Education Website

#### Shennongjia UNESCO Global Geopark, China

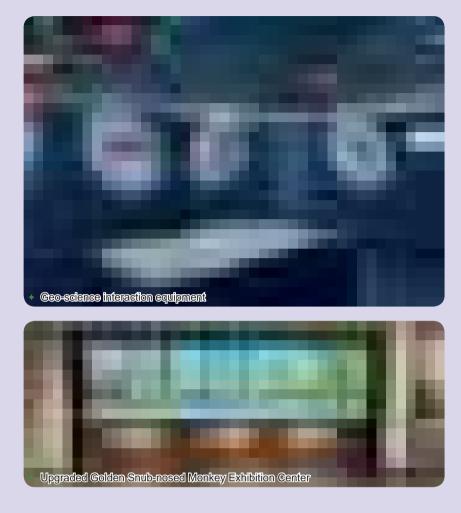
On January 11, the nature education website of Shennongjia UNESCO Global Geopark, together with its supporting mobile app and WeChat applet, was officially launched. With the online and offline efforts in popular science education, Shennongjia UGGp has infiltrated science education into the daily life of the public.

The official launch of the nature education website and its supporting App and WeChat applet is another significant move of Shennongjia UGGp for popular science education after its upgraded high-tech exhibition centers were opened in August 2021. This nature education website takes the typical geological landscape, rare plants and animals, folk culture and other unique contents of the Geopark as its main focus, and presents the natural science information of Shennongjia UGGp in an all-round way, and radiates to the public through various terminals, promoting the awareness of the community

residents and visitors on environment protection and nature conservation, with the aim of realizing the harmonious coexistence and sustainable development of man and nature.

In recent years, Shennongjia UGGp has made efforts to optimize the conditions of its science popularization platform, the forms of its science popularization activities, the contents of its science popularization resources, and the mechanism of its popular science education. Through

## Education



location shooting, 3D modeling, customized voice interpretation, using QR codes, construction of nature education website, and digitized upgrade of offline exhibition centers, Shennongjia UGGp has built a modern popular science education system integrating online and offline terminals with AR, VR and other new technologies as the main presentation forms, establishing a multi-angle, multiconnotation, multi-element and multi-dimension innovative nature science education platform

and education, experience and demonstration base for ecological civilization, which further improves the Geopark's popular science education capacity, provides the public with a science popularization space with rich contents and various forms of experience, vividly popularizes scientific knowledge and showcases the Geopark's characteristics.

> Chen Jinxin Shennongjia UGGp, China snjdzgy@163.com



WeChat applet



 New nature education website of Shennongjia UGGp

## 22 Geoparks Live Broadcast of the Opening Ceremony of the APGN Week and World Earth Day

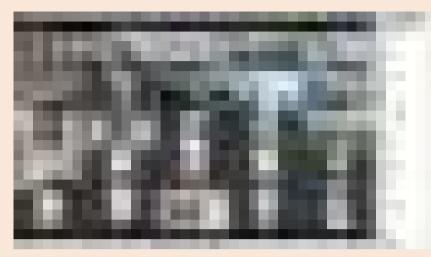
Yandangshan UNESCO Global Geopark, China



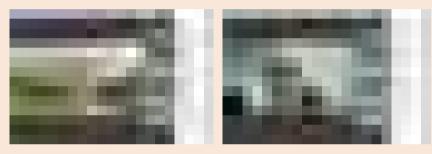
The poster

At 8:40 am, April 22nd, the opening ceremony of the Third Asia-Pacific Geoparks Network (APGN) Week and 53rd World Earth Day, held jointly by 22 geoparks was broadcasted online. In order to prevent further spread of Covid-19, the ceremony was held online and audience could watch the whole live broadcast on Apps such as Douyin, the Chinese version of Tencent Meeting. Yandangshan Global Geopark hosted the whole ceremony.

Initially, Jin Xiaochi, the vice president of Global Geoparks Network and the coordinator of Asia-Pacific Geoparks Network as well as the researcher of Chinese Academy of Geological Sciences, and Zheng Yuan, professor of engineering of Chinese Geoparks Network, gave a speech respectively, and they both gave recognition to the positive effects the Third APGN Week and World Earth Day activities had on popularizing geoscience. Then, Danxiashan UGGp, Yimengshan UGGp and



+ The opening ceremony was broadcasted online



+ Opening ceremony speech by Mr. Jin Xiaochi (left) and Mr. Zheng Yuan (right)

Longyan aspiring geopark gave a brief introduction about the programs they had done in the past and the plan for the following years. Later, 11 geoparks, including Yandangshan, brought us a vivid demonstration about the typical geological feature in their geoparks, and another 11 geoparks, including Dali-Cangshan, introduced their parks briefly with documentaries, giving audience an opportunity to visit geoparks located around China without leaving their home.

In Yandangshan, Jin Afang, an interpreter responsible for science popularization, gave us a short but vivid introduction about the overall geological features in Yandangshan, and details were given when it came to rhyolite and Couple Peak in Lingfeng Area. Her logical presentation gained wide recognition among audience online.

The on-the-spot broadcast of opening ceremony has enhanced the positive effects of Chinese geoparks, and has made Chinese geoparks more visible around the world. Through this activity, cooperation between geoparks has been strengthened, laying a foundation for interaction after the Covid-19 pandemic and regional sustainable development.

> Lu Qinfei Yandangshan UGGp, China





The introduction of the geoparks



\* "Danxiashan Spectacular Nature in the World" Book Crossing is being held in China

# The 2nd Danxiashan Campus Event: Book Crossing and Science Lectures Held in 250 Schools

Danxiashan UNESCO Global Geopark, China

The 2nd "Danxiashan: Spectacular Nature in the World" Book Crossing is being held in China. The event is organized by Danxiashan UNESCO Global Geopark, aiming at popularizing geoscience, promoting the protection of geological relics and the sustainable development of the community, and transmitting the geoscience values of danxia landscape and Danxiashan





Student volunteers are giving lectures in middle schools

Donate books to schools

UGGp to the public.

By March 2022, 252 science lectures in 250 schools or institutions in 73 cities of 23 provinces had been held. A total of 756 books had been donated and more than 20,000 people had participated in the lectures. 9 exhibitions of the achievements of the field study in Danxiashan UGGp had been organized, which further enhance the public's understanding of geoscience.

In order to well organize

the event, Danxiashan UGGp has recruited many science popularization volunteers and encourages them to give lectures in the places close to them. On the theme of danxia landscape and the geoscience value of Danxiashan UGGp, a variety of activities including science lectures, seminars, parent-child activities, professional courses, etc. have been carried out. They have been well received by teachers and students.

Since the 1st "Danxiashan: Spectacular Nature in the World" Book Crossing was held in 2018, nearly 500 science popularization activities have been organized in different countries including China, Indonesia, Thailand, etc. As a "Danxiashan Model" for telling the stories of a UGGp, the event becomes an important window for people to realize geoscience.

> **Li Guiqing, Xiao Wei** Danxiashan UGGp, China

> > GGN NEWSLETTER 2022 ISSUE 1&2

## **T**ianzhushan UNESCO Global Geopark Innovates the Education Platform for Natural Science Popularization

Tianzhushan UNESCO Global Geopark, China

In recent years, Tianzhushan UNESCO Global Geopark has continuously attached great importance on the science popularization education. Relying on the advantaged resources, it has strengthened cooperation and actively organized various forms of science popularization activities with rich contents, attracting more young students to participate in nature education.



### 1. Creating a science popularization brand of Tianzhushan Nature Lecture Hall

Since 2019, Tianzhushan UNESCO Global Geopark has organized some local amateurs of natural science in the park to join the volunteer science popularization service team of Tianzhushan UGGp, creating a science popularization brand of "Tianzhushan Nature Lecture Hall ". Tianzhushan Geopark regularly disseminates the knowledge of nature and ecology for primary and secondary school students in the city. So far, 15 sessions have been held, covering biodiversity protection, bird-watching, plant grafting, plant leaf observation, science lectures on nature education, etc., involving nearly 5,000 primary and secondary school students.

### 2. Developing science popularization courses

Tianzhushan UGGp and China University of Geosciences (Beijing) jointly compiled primary school edition, middle school edition and high school edition of the "Research-Travel Manual of Tianzhushan UNESCO Global Geopark ", and designed teaching tools, courseware and teaching plans. The park has compiled popular science books, such as Qianshan Fauna and

Tianzhushan Birds, covering modern biology, paleontology, earth sciences, geology and other disciplines. In terms of teaching methods, specimen display, knowledge teaching, video, pictures, mutual interaction and other ways are combined, so that students can think in activities and explore natural knowledge in practices.



### 3. Focusing on creating high-quality research trips

At present, the park has a total of 120 interpretation boards of geological relics, 30 natural interpretation boards, and 8 science popularization corridors. At the same time, the park has upgraded plant signage system, with owl as the background of the new nameplate, adding Pinyin and QR code information.

Tianzhushan Geopark Museum, opened in 2019, is a local natural museum integrating exhibitions, popular science education, academic research and social services. Heping Forest Education Base has also been built, with forest experience education as the carrier, various forms of forest experience are organically connected through the original ecological forest experience paths, so that teenagers can explore and understand nature. All these have greatly expanded the natural research resources in Tianzhushan area.

In order to create an environment of loving science and respecting innovation in the whole society, and cultivate the consciousness of advocating science among young people, Tianzhushan UGGp is committed to popularizing scientific knowledge in the field of natural resources, constantly advocating the ecological civilization concept of "ecological priority, green development", and striving to create a new horizon of science popularization and research in the whole area.

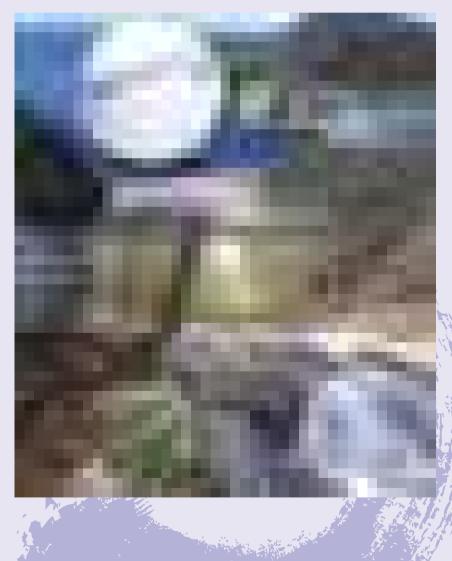
#### **CHENG Xiaoqing, HUANG Wen**

Tianzhushan Geopark Administrative Center, China tzsgeopark@126.com



## **R** Peninsula on Your Screen – The Izu Peninsula UGGp Greatly Enhanced Its Digital Presence During COVID-19

Izu Peninsula UNESCO Global Geopark, Japan

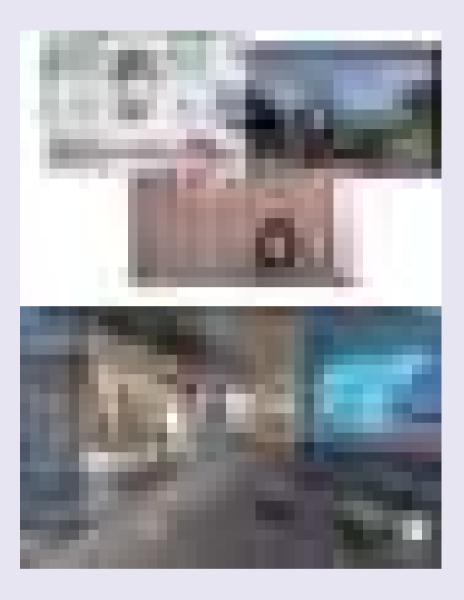


Dramatic decrease in visitors have severely affected geoparks worldwide. The Izu Peninsula is no stranger to this hardship. GEORIA, our central facility hub, was forced to close for an extended period, losing approximately two-thirds of its visitors. As the peninsula heavily depends on tourism, gloomy moods engulfed the entire region for over a year.

However, tough times also bring opportunities. Our passion for revitalizing people in this Peninsula spurred us to harness digital technologies to tackle the conundrum caused by the pandemic. Our attempts began by compiling video messages from various people in the peninsula. Mr. Kikuchi, the Mayor of Izu City and the President

of the Izu Peninsula Geopark Promotion Council, initiated this compilation. Their smiles, which have always enchanted visitors for decades, warmly cheered anyone who accessed the website. Eventually, the Geopark Council started offering self-guided virtual tours of our central facility and geosites. You can fully explore the exhibition of the central facility and watch any video screened there. Tens of surroundies were installed on our geosites for virtual presentation of the marvelous landscapes. Furthermore, spherical projections of some geosites enable us to investigate their geological features from any angle. The new content, developed during the semilockdown period, became available on our website to reach wider audience.

Indeed, we are now witnessing an impressionable moment in our history. Nobody can predict exactly how much longer we must endure this pandemic. The foreseeable end is regretfully yet to come. However, the prolonged challenge has tremendously instigated the innovative talents of human beings. The



rapid enhancement of virtual presentations by art galleries, museums, world heritage sites, and geoparks exemplifies a tiny glimpse of this creativity. As a narrator depicting the interaction between humans and nature, global geoparks should contemplate the ongoing struggle

of humanity against the new environmental challenges that emerge before us.

Shyuji Tsuji, Katsuhiko Asahi Izu Peninsula Geopark Promotion Council, Japan info@izugeopark.org

## Longyan Geopark Micro-film "Answer from Mountain" Won the Second Place in the 1st Global Geoparks Network Film Festival

Longyan Aspiring UNESCO Global Geopark, China

On the evening of December 16, 2021, at the award ceremony of the 1st Global Geoparks Network Film Festival held in Jeju Island Global Geopark, Republic of Korea, the micro-film, *Answer from Mountain*, submitted by Longyan Aspiring Global Geopark stood out from the 62 shortlisted works from 27 countries around the world and won the second place. It is the only award-winning work in China!

Longyan Geopark microfilm *Answer from Mountain* tells the story of the growth and inheritance of the father and daughter, two generations of forestry staff, eulogizing the warm family affection and nostalgia of the Hakka people in the simple scenes, while showing the geological, cultural and ecological characteristics, the achievements of sustainable development of Longyan Geopark and the beautiful vision of harmonious coexistence between man and nature.

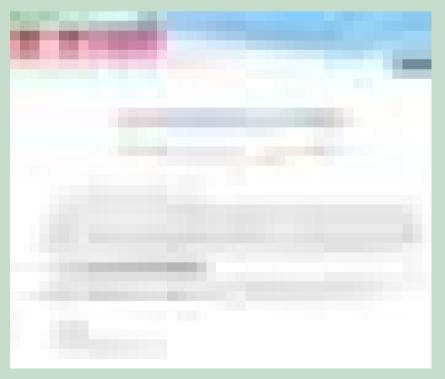
As soon as the award-winning news came out, it swipe the whole network! According to incomplete statistics, the news has been read on media platforms such as Xuexi Qiangguo, CCTV News, Tencent, WeChat, Microblog,

## Promotion and Networking



etc. over two million times. With the excellent production and innovative creativity, this microfilm has been rebroadcast by many domestic and foreign media platforms and various APGN official social accounts, where it has been played over one million times. Due to the strong reaction in the society, it was included in the "Top Ten Events in China's Natural Protected Areas in 2021" that Longyan Geopark micro-film Answer from Mountain won the award in the 1st Global Geoparks Network Film Festival.

> Lin Wensheng Longyan aUGGp, China



+ Top Ten Events in China's Natural Protected Areas in 2021

# Protect Nature Through the Conservation

# Nature Through the Geopark Conservation Program: Hello Environment!

Langkawi UNESCO Global Geopark, Malaysia

Langkawi, 19 March 2022 -Inauguration of the Menyantuni Alam Geopark Conservation Program: Hello Environment was officiated by the Royal Patron of Langkawi UNESCO Global Geopark (LUGGp) Her Highness Dato 'Seri DiRaja Tan Sri Tunku Puteri Intan Safinaz Binti Almarhum Sultan Abdul Halim Mu'adzam Shah, Tunku Temenggong Kedah. The program began with a leisure bicycle ride in nature surrounding areas in Langkawi, Malaysia.

The target groups in the program include stakeholders, government employees, tourism industry players, and the Langkawi community and Geopark stakeholders. Among the contents of the Geopark conservation program for Nature:

Hello Environment are as follows:

i. The Nature Cycling Program will be held 4 times a year featuring a group-cycling route that stretches up to 25 to 30 km. This cycling route will pass through several villages and a community hall which served as a pit stop and also used as a location for Recycle and Redeem (RnR) and Recycle for Life (R4L) to the villagers/local community.

ii. GEOCoral/Marine program will be held twice where the Coral Reef Conservation Program in the area of Kilim Karst Geoforest Park and Kubang Badak Biogeotrail. Coral Reefs are a unique, complex, and highly productive marine ecosystem. Most of the sea corals that form coral reefs are found at depths of less than 20 meters and grow rapidly in areas of clear water that are permeable to sunlight. In addition to the coral reef cultivation mission, Langkawi UGGp will also focus on relocating grown coral reefs to suitable areas to ensure that the coral reefs continue to be preserved in the right breeding location and suitable conditions for them to survive;

iii. The Mountain Climbing Expedition Program will be held 4



times a year and focuses at the Geosite area. The involvement of all participants in the program will provide value, especially in providing an understanding of Langkawi Geopark and the Geosite visited. In addition, Geopark Plogging activities will also be implemented in the program.

During the Geopark: Hello Environment conservation program, the use of plastic and polystyrene will not be allowed. The aim is to encourage environmentally sustainable activities and educate the people of Langkawi about the disadvantages of using the material and in turn, will create a responsible society in line with the government's intention to make Langkawi as the first low carbon island in Malaysia.

#### JUSTIFICATION OF PROGRAM IMPLEMENTATION

i) Promote the Langkawi UNESCO Global Geopark's
(LUGGp) sustainability activities, as well as provide public
exposure to the importance of maintaining LUGGp status;

ii) Provide awareness and knowledge to Langkawi
community on the importance of conservation activities and
their impact on Langkawi;

iii) Encourage active involvement and cooperation
between all agencies and industry players as well as youth
in further strengthening LUGGp and creating a sense of
belonging to Langkawi;

iv) Make Geopark events as one of the initiatives to further boost Langkawi as an geo-tourism destination in the world;

 v) To provide a more responsible and knowledgeable generation to take care of the natural treasures in Langkawi; and

vi) All programs and events to be implemented in compliance with COVID-19 SOPs.

# Shennongjia UGGp Continues to Increase Local Residents' Income

Shennongjia UNESCO Global Geopark, China

Early in the morning of March 28th, Mao Guanhui, a resident of Laojunshan Village, Muyu Town, Shennongjia, stands on her 4,000m<sup>2</sup> seedling field to check on the growth conditions of the rare plant seedlings.

This field bears the new hope of Mao Guanghui. It's been only two weeks since she planted the seedlings. After a few spring rains, they are already sprouting vigorously. "We just started to plant these seedlings this year. In the past we planted corn and potato, and the yield can barely feed the family," says Mao Guanghui, "Shennongjia Geopark provides the seedlings for free, and also sends technical staff to teach us cultivation techniques".

Why did she give up corn and potato that she had grown for decades and choose seedlings of rare plants? "The seedlings worth more money than crops," Mao explained frankly.

Since a month ago, the villagers of Laojunshan have been busy planting seedlings of more than 10 rare plant species provided by Laojunshan Division of the Administration of Shennongjia National Park.

"This year we have rented 240,000m<sup>2</sup> of land from more than 120 households to develop the rare plant cultivation base to increase the residents' income," Tan Meng, Chief of

the Community Affairs Office of Laojunshan Division introduces. "In order to consolidate the results of poverty eradication, promote rural revitalization, and respond to the call of community residents, Shennongjia Geopark continues to rent land this year, and currently more than 700,000m<sup>2</sup> of land has been rented from the local residents."

Besides the rental income, each villager can get CNY 1,200 per year for seedling management. When the seedlings are big enough, the Geopark will buy them back from the villagers and use them for vegetation restoration. The estimated income increase per



household will reach CNY 5,000 a year.

In recent years, Shennongjia UGGp has taken a series of measures, including employing local residents as part-time rangers, providing subsidies for using electricity instead of firewood, etc., to make its community residents participants and beneficiaries of ecoconservation. Shennongjia UGGp will continue to share the benefits from eco-conservation with the local people.

> Chen Jinxin Shennongjia UGGp, China snjdzgy@163.com



 Mao Guanghui checking on the growing conditions of the seedlings



#### Sanqingshan UNESCO Global Geopark, China

In order to build a beautiful and liveable region and create a high-quality world-class tourism destination, the Sanqingshan UGGp has implemented a clean human settlements project, which has significantly improved the human settlements in the Geopark and enhanced the residents' awareness of ecological civilization.

The Geopark has promoted the revolution of rural toilets, and demolished earth closets and dilapidated houses in the villages. The ponds and ditches have been dredged and desilted, and the garbage and poultry faeces in the villages have been cleaned up, which has improved the appearance of the villages.

The Geopark has strengthened village planning, and integrated farmers' housing construction into village planning, through which the existing rural housing, infrastructure, natural environment and other resources have been utilized and the original style of the villages have been retained. In addition, the problems of illegal buildings, parking, storage, posting have been resolved.

Through supervision and publicity, the Geopark has encouraged the residents to be advocates and participants in the clean human settlements project, which has promoted the classification of rural domestic waste, and made the houses, streets and public areas clean and tidy.

According to statistics, so far, the Geopark has cleaned up 1630 tons of rural domestic waste and 12 kilometers of ditches in the village, and carried out more than 500 educational activities in the villages. Therefore, the communities have taken on a new look.

> Miao Gang, Chen Siyuan Sanqingshan UGGp, China sqsdzgy@163.com



# **E**ngines of China 2021 Motor Racingof Ice and Snow Held in Jingpohu UNESCO Global Geopark

#### Jingpohu UNESCO Global Geopark, China

Engines of China 2021 motor racing of ice and snow was held in Jingpohu UNESCO Global Geopark from January 1st to 6th. Engines of China is the ace column of CCTV-5. The motor racing was organized by the youth column center of China Media Group, undertaken by the government of Mudanjiang and creative media of CCTV, and coorganized by the management committee of Jingpohu UNESCO Global Geopark.

During the six-day racing, drivers from all over China competed on the ice surface of Jingpo Lake. After the

competition of "rapid time trial", "obstacle racing of ice and snow", "concentric circle racing of ice and snow" and other events, the competition came to a successful conclusion. The success of the competition has greatly improved the popularity and reputation of Mudanjiang City and Jingpohu UNESCO Global Geopark. It is reported that Engines of China 2021 motor racing of ice and snow has been broadcasted on CCTV-5 on January 23th, 25th and 26th. Jingpohu Global Geopark Management Committee publicized the competition

through social media, such as

WeChat and Weibo. By mid January, more than 100 new media platforms had publicized the competition. The videos of motor racing have been forwarded by mainstream media such as CCTV video, CCTV sports and many Weibo users, and it was viewed more than 180 million times.

Relying on the traditional media and social media, Engines of China 2021 motor racing showed the charm of the ice and snow of Jingpohu UNESCO Global Geopark, and enhanced the influence of Mudanjaing ice-snow tourism.

## undreds United to Support Earth Hour in the English Riviera UNESCO Global Geopark

English Riviera UNESCO Global Geopark, United Kingdom of Great Britain

Around 600 people gathered to celebrate Earth Hour and show their support for the planet on Torquay Seafront in the heart of the English Riviera UNESCO Global Geopark.

Earth Hour Torbay – an event commissioned by the English Riviera UNESCO Global Geopark in partnership with Torbay Council - took place on Saturday 26th March when organisers encouraged people to make a recycled lantern, switch off their lights at home and enjoy an evening of 'unplugged' entertainment on Torre Abbey Sands. The event was also used to celebrate the local authority adopting its Carbon Neutral Council Action Plan and Policy on Tuesday 22 March.

Earth Hour is a worldwide movement organised by the World Wildlife Fund (WWF) and takes place on the last Saturday of March in over 190 countries across the globe. Participants are called on to switch off their lights between 8.30pm and



 All of the community climate pledges were tied to a willow sculpture which was carried at the front of the lantern procession (photo by Kathy Cole)

9.30pm local time, as a symbol of commitment to the planet. Within the English Riviera UGGp, Earth Hour Torbay saw people meeting to sign a climate pledge, before the seafront festoon lights were turned off and all joined together for a lantern procession along the prom to the beach, led by Drum Devon and an illuminated stilt walker.

Down on the beach, an artwork of a giant lightbulb and the words "Earth Hour Torbay" had been created earlier in the day by local sand artist Geoffrey 'The Sandyman' Ward. It was then illuminated with more than 800 candles in recycled jars by event organisers, Tonic Creatives. Councillor Jermaine Atiya-Alla – the Climate Change Member Champion welcomed all and launched the event as hundreds of people looked on from the promenade and bridge above.

There then followed entertainment including light and fire juggling and live sea shanty music. The evening finished

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- Recycled jar lanterns lit up the Earth Hour symbol on the beach (photo by Kathy Cole)
- The unplugged entertainment at Earth Hour included fire juggling which made for quite a spectacle (photo by Kathy Cole)



with more drumming, before the glass jars were collected in to be recycled before the tide came in.

Nick Powe, Geopark Chairman said: "Having so many, of all ages, switch off and join this event was just wonderful. It made for a great opportunity to reflect on our daily lives and think about what we can all do as individuals on a daily basis to help make change happen. All UNESCO Global Geoparks around the world are aligned to the 17 UNESCO Sustainable Development Goals so we were delighted that the Council were able to join us and support this event to make it into something

special for all those who attended. Plus, a really big thank you has to go out to all those who made and brought along their own recycled lanterns which helped to make it such a magical event."

Councillor Mike Morey, Cabinet member for Infrastructure, Environment and Culture at Torbay Council said: "Earth Hour Torbay was a fantastic event, and I would like to thank the organisers, the acts and everyone who turned off their lights at home and came out to support on the night. It was great to see such a wide age range of people in attendance, all keen to show their support and commitment to



 Many families brought their own special homemade recycled lantern which created a magical atmosphere (photo by Kathy Cole)

becoming more environmentally friendly. The entertainment and atmosphere were amazing, and I do hope this can become an annual gathering."

This event was funded by Torbay Council and the English Riviera UNESCO Global Geopark and delivered by Tonic Creatives.

### Melanie Border English Riviera UGGp, UK m.border@englishrivierageopark.org.uk



# Conducted Environmental Protection Activity

#### Shilin UNESCO Global Geopark, China

**Chilin UGGp** 

Shilin UNESCO Global Geopark is located in Shilin County, a traditional farming county with fairly good ecological environment. Since it was rated as a Global Geopark in 2004, Shilin Global Geopark Administrative Bureau has always attached great importance to environmental protection.

To raise awareness and introduce green development to the general public, Shilin UGGp conducted environmental protection activity at the Visitor Center of the Geopark in March 31st, 2022. Staff members of the Geopark distributed related publicity materials such as leaflets, videos, brochures, eco-friendly cotton bags to the visitors to show how climate change can affect our environment and the potential impact on the region, expecting the visitors to cherish unique geoheritage within the Geopark,



 Geopark staff members preparing materials (photo by Wang Limei)



 Staff members introducing geoheritage of the Geopark to the visitors (photo by Wang Limei)





(photo by Wang Limei)

protect natural environment, choose to live a green and lowcarbon life, develop a good habit of conserving energy by starting from the trivial things in their lives. At the same time, the concept of green tourism was widely disseminated among the visitors by the LED screen and broadcasting systems, stressing that tourism activities need to be kept within the limits of the ecology and environment.

Climate change is among the top 16 topics within UNESCO Global Geoparks. As one of the first batch of global geoparks, Shilin has been taking steps to tackle climate change, from cultivating ecological awareness to adding new forests, grasslands and wetlands, and combating air and water pollution. Shilin has made remarkable progress since two decades ago. Green growth was significantly stimulated and Shilin County was rated as National Garden county, National Ecological Civilization **Construction Demonstration** Area and Natural Oxygen Zone of China. Advanced afforestation and improve the living environment in both urban and rural areas. The quality of surface water met the standard of Class II, the top second tiers in the national five-tier quality system for surface water, ranking first in Kunming City. Local residents have raised their awareness of ecological protection greatly, actively

participated in the resource's conservation of Shilin UGGp, and their lives have been well improved.

**UNESCO Global Geoparks** are educators on current climate change as well as adopting a best practice approach to utilizing renewable energy. Shilin will promote nature-caring activities and green tourism, try every possible effort to enhance harmonious coexistence between humans and natures. Looking forward, though challenges still remain, Shilin will continue to place ecological protection high on its agenda, do its bit for a green and beautiful China.

Shilin UGGp, China

# ree Planting in the Basque Coast UNESCO Global Geopark

#### Basque Coast UNESCO Global Geopark, Spain

A total of 500 trees were planted with the objective to turn into forests two agricultural plots of land that have been left unused in the holm oak forest Arantza.

Following the tradition of recent years, in the Basque

Coast UNESCO Global Geopark, together with local entities of the territory, we organized a tree planting last March. We planted it in a holm oak forest called Arantza, which is located in the town of Deba, one of the



+ One of the families involved in the tree planting

municipalities that conforms the Basque Coast Geopark. We met in the morning and after a half-hour walk, we reached the plantation site.

For the last few years, we had been using a plot of land in another location for tree planting until it was filled last year. Therefore, for this occasion we chose the new location mentioned above. The objectives of this initiative are, among others, to increase the protective function of steep soil, combat the impact of climate change and develop a high-quality plant cover that is sustainable over time to improve the environmental ecosystem.

This year we have planted about 500 trees aiming to convert two unused agricultural lots into native forest. Due to the presence of holm oaks around, most of the trees that were planted were of



Views from the Arantza holm oak forest

the same species. In addition, strawberry trees, laurels and blackthorns were also planted and we introduced some birches, hazelnuts and oaks. All of them were species that come from native nurseries and are from native seeds. We finished the activity with a small lunch. This initiative allows, on one hand, the recovery of the forest and the native landscape in the Biotope and, on the other hand, to raise public awareness about the environmental values of this natural space, mainly among children.



The land after planting trees

#### Leire Barriuso

Manager of Geogarapen (Association for the management of the Basque Coast Geopark UGGp, Spain) geopgarapen@geogarapen.com



## Celebrating the 18th Anniversary of the Establishment of Global Geoparks Danxiashan UGGp and Zhangjiajie UGGp tie Sister Relationship

#### Danxiashan UNESCO Global Geopark, China

Danxiashan, Guangdong Province and Zhangjiajie, Hunan Province signed an agreement to tie a sister relationship to celebrate the 18th anniversary of the two UNESCO Global Geoparks, aiming at well protecting and utilizing the geological heritages of international significance and attracting public attention to the conservation of the earth. In accordance with the agreement, this will strengthen exchanges in protection and management, planning and construction, scientific research and monitoring, brand building, tourism promotion, science popularization and community development between the two

UGGps. They will establish cooperation mechanisms and joint institutions to continuously promote information sharing and the exchange of tourists.

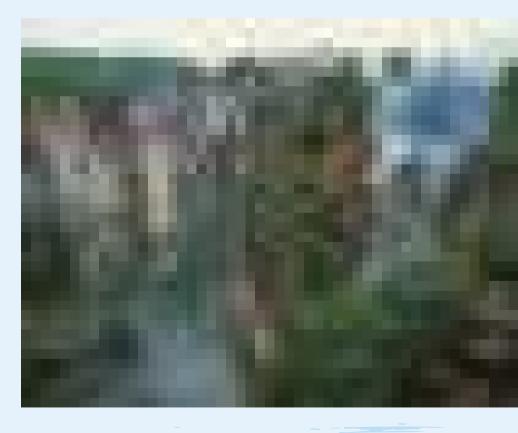
Since 2019, the two geoparks have initiated and organized the Sister Geoparks Mutual Exhibition on the Earth Day and the 2nd APGN Geoparks Week, which have provided high-quality science popularization services and set up a tourists destination exchange platform for the citizens and tourists from the two places.

The two geoparks have been sharing the think tanks, the experience of World Heritage monitoring and UGGp revalidation. Prof. Zhang Chaozhi of Sun Yat-sen University, Prof. Su Dechen, researcher of the Chinese Academy of Geological Sciences, and Huang Heging, researcher of the Institute of Geographical Sciences and Resources of the Chinese Academy of Sciences have all given strong support to the development of geotourism between the two geoparks.

In July 2019, Zhangjiajie UGGp sent observers to participate in the Danxiashan Science Popularization Volunteers Training Camp to conduct in-depth research on Science Popularization in Danxiashan UGGp. The tourism companies in the two geoparks constantly exchanged their tourists markets as well.

UNESCO Global Geoparks and World Natural Heritage are common wealth and precious resources given by nature to mankind. Strengthening the friendly exchanges and cooperation between geoparks is one of the tasks of the development of UNESCO Global Geoparks. In recent years, Danxiashan UGGp has strengthened exchanges with other UGGps. Since it established the first sister park relationship with Huangshan UGGp, Anhui Province in 2004, it has established sister park relations with 23 geoparks in the world. As the 24th sister park of Danxiashan UGGp, Zhangjiajie UGGp will become the first one to carry out interactive exchanges annually with it. The two geoparks will formulate and implement an interactive plan in the near future and join hands to open a new chapter in all-round and in-depth cooperation.

> Li Guiqing, Xiao Wei Danxiashan UGGp, China



# Reported on Toya-Usu UNESCO Global Geopark Activities Affected by COVID-19

Toya-Usu UNESCO Global Geopark, Japan

Toya-Usu UNESCO Geopark is located in Hokkaido, northern Japan, and displays a unique exhibition of active volcanism on the Pacific Rim. Lake Toya was born approximately 0.11 million years ago, when there was a major eruption. Mt. Usu was born in the southern part of Lake Toya in southwest Hokkaido approximately 20000 years ago, and it has happened a sector collapse approximately 10000 years ago, and no eruption occurred until Edo Period. However, it is an active volcano that erupted nine times between 1663 to 2000.

We established a system of Toya Caldera and Usu Volcano Meister System in 2008 in properly understand the characteristics of this volcano and in order to pass on the wisdom of mitigating disasters and the memory of the eruptions.

Last year, we formulated thoroughgoing COVID-19

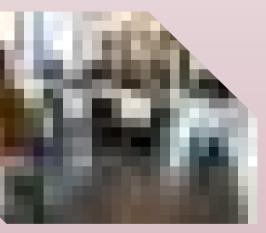
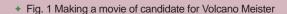


Fig. 2 Interviewing of Hybrid type



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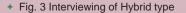
measures such as Zoom, movies and so on, and convened an accreditation test for Volcano Meister (Figure. 1, 2). As a result, three people passed the test and accredited a total of 56 Volcano Meisters (Figure. 3). We joined with Volcano Meister's in promoting the disaster risk reduction education programs, promoting the Geopark, and activating the development of a region.

Especially, the disaster risk reduction education program associate participants of local elementary school through high school and around Japanese high school students have been increasing for several years (Figure. 4). In addition, the Volcano Meister's activities in the Geopark area, such as volcano guiding as well as disaster risk reduction lecturers at schools, have been increasing. It is a very meaningful activity for people who did not experience the eruption in 2000 to know about the characteristics of the area.

The natural disasters have occurred frequently in Japan, including the 2011 Great East Japan Earthquake, the 2014 eruption of Mount Ontake, and the 2016 Kumamoto earthquake. We would like to let people know disasters could happen at any time and take measures to lead to disasters with no casualties, similar to the 2000 eruption. Moreover, we hope that these actives will lead to disaster mitigation throughout around the world.

Satoshi SASAKI Toya-Usu UGGp Council, Japan info@toya-usu-geopark.org sasaki.satoshi@town.toyako.hokkaido.jp

+ Fig. 4 Three new Volcano Meisters



## **Tree Planting Activity Held in Funiushan UGGp**

Funiushan UNESCO Global Geopark, China

In order to better practice green tourism, improve the ecological environment of the geopark and response to climate change, on March 12, 2022, the 44th Planting Day in China, Funiushan UGGp organized more than 1,000 staffs and local people to plant trees in the region of the geopark.

The director of Funiushan UGGp and the staff members participating in the training activities shoveled soil, watered the tree, and called on the local people in the Funiushan Geopark to actively join in the construction of forest Nanyang, optimize the ecological environment, and jointly build a happy and beautiful home with concrete actions. On that day, more than 13800 evergreen tree species such as Osmanthus fragrans, Eucommia ulmoides,



Magnolia denudata, Acer monoes, Ligustrum lucidum Ait and so on were planted, covering an area of about 125*mu* (1 *mu* ≈0.0667 *ha.*).

Through this tree planting activity, the administration bureau of Funiushan Geopark aroused local people to seriously practice the concept of "lucid waters and lush mountains are invaluable assets", and "mountains, rivers, forests, fields, lakes and grass are a community of life". The geopark fully implemented the speech of President Xi Jinping during his visit to Nanyang, took the road of green development, and made every effort to build a strong ecological security barrier, protected the clear waters and green mountains, and promoted the high-quality development of Funiushan UGGp, achieving win-win development in ecological, economic and cultural fields. This tree planting activities in Funiushan UGGp also contributed to the construction of Nanyang sub-central city for green ecological environment.

> Wang Yazhe Funiushan UGGp, China hnfnsgyglj@163.com

# The Management Board Non nuoc Cao Bang UGGp Conducted A Field Survey to Implement the Piloted Environmentally Friendly Agriculture for Sustainable Tourism

Non nuoc Cao Bang UNESCO Global Geopark, Viet Nam

On April 7th, 2022, the Management Board of Non nuoc Cao Bang UGGp conducted a filed survey and met with the villagers of Hang Thoang hamlet, Dam Thuy commune, Trung Khanh district on developing environmentally friendly agriculture for environmental protection and sustainable tourism development in the Non nuoc Cao Bang UGGp territory.

Developing environmentally friendly agriculture associated to sustainable tourism is one of the important projects in the Plan on the geopark development 2022, contributing to the effectiveness of the Plan No. 11-KH /BCD dated March 29th, 2022 of the Steering Committee of Non nuoc Cao Bang Geopark on implementing breakthrough projects on sustainable tourism development phase 2022-2025. This is also a current trend in



 The Management Board of Non nuoc Cao Bang UGGp worked with villagers in Hang Thoang hamlet, Dam Thuy commune, Trung Khanh district

tourism industry that is of concern towards the conservation of biodiversity and ecosystem and protection of environment and tourism resources in the geopark territory in particular and in Cao Bang province in general.

The Geopark Management Board carried out a field survey to assess the potential for the implementation of the project, discussed with representatives of households in Hang Thoang hamlet and the hostess of the Nung horse homestay to determine the needs, willingness and participation of the village's households in developing the model of environmentally friendly agriculture associated with

Surveying the vegetable garden of the Nung horse homestay, Hang Thoang hamlet, Dam Thuy commune, Trung Khanh district. tourism development. Initially, 8 households are willing to participate in the project.

After discussing, the Geopark Management Board and the villagers of Hang Thoang hamlet conducted a field survey to select the place to deploy the project. The selected location is a place surrounded by the Quay Son River, with beautiful scenery, fertile soil, and convenient irrigation with a system of water wheels along the river. In particular, in this hamlet, that a geopark partner, Lan's homestay (Nung horse homestay) has been running experience tourism associated with indigenous cultures attracting a lot of domestic and international tourists is a favorable condition for the implementation of this project. Besides, the Geopark Management Board will also promote product consumption in the Non nuoc Cao Bang Geopark partner network to ensure the market for the products.

For the implementation of the environmentally friendly agriculture associated with tourism development, the Geopark Management Board will continue to work with the People's Committee of Trung Khanh district and relevant agencies to support the training on agricultural techniques for the locals, communication and promotion on social media, product consumption, planning on growing seasonal vegetables, selecting vegetables matching with the soil condition and agricultural seasons and the needs of visitors, contributing to promoting the cuisine of Cao Bang. This is also one of the projects towards the "localization of food production" strategy, contributing to the conservation of indigenous plant and livestock genes, mitigation of carbon footprint and environmental pollution from agricultural activities, and improving the quality of tourism services in general, and food services in particular in the Eastern route of the geopark - "Experience the traditional cultures in a wonderland".

Non nuoc Cao Bang UGGp, Viet Nam

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# New supporting organisation for the German-Polish transnational UNESCO Global Geopark Muskauer Faltenbogen / Łuk Mużakowa

#### Muskauer Faltenbogen / Łuk Mużakowa Bang UNESCO Global Geopark, German-Polish



In November 2021, the new German-Polish supporting organisation for the Muskau Arch UNESCO Global Geopark, the European Grouping for Territorial Cooperation (EGTC) Geopark Muskau Arch, was founded. The EGTC comprises 14 municipal members from Germany and Poland. The main body is the General Assembly, which has elected the Vice-Marshal of the Lubuskie Voivodship, Mr. Tadeusz Jędrzejczak, as its chairperson. With this association, the UGGp Muskau Arch now has a consolidated institutionally and financially independent basis under the direct decision-making power of the Geopark municipal administrations – a firmly rooted bottom-up organisation. This concludes a success story of around 18 years of the German and Polish Associations, which have been the sponsorship up to now.

# Invest in Our Planet International Geopark Webinar in Conjunction with Earth Day 2022

Langkawi UNESCO Global Geopark, Malaysia

Langkawi, 25th April 2022 - Langkawi UNESCO Global Geopark, Malaysia had organised the International Geopark Webinar in conjunction with the worldwide Earth Day celebration on 22nd April 2022. This webinar featured speakers from four geopark territories namely Langkawi UNESCO Global Geopark (Malaysia), Aspiring Geopark Khorat (Thailand), Rinjani-Lombok UNESCO Global Geopark (Indonesia), and Hong Kong UNESCO Global Geopark. It had also successfully garnered the participation of at least 240 individuals from various Asian, Middle East, and European countries such as China, Egypt, and the United Kingdom. This Webinar was started opening remarks by Mr. Nasaruddin Abdul Muttalib, Chief Executive Officer of LADA and greeting by Professor Emeritus Ibrahim



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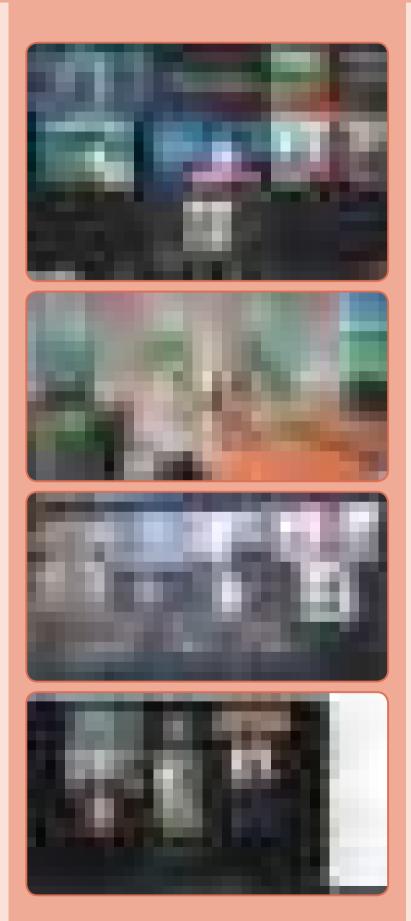
### Conference, Forum and Training Course

Komoo, Vice President of Global Geopark Networks (GGN).

During the opening of the webinar, Mr. Nasaruddin Abdul Muttalib highlights the importance of caring for the environment. This is especially important including in Langkawi as the island has restricted space and limited resources. Thus, each of its community members must do their parts in environmental stewardship and sustainability promotion. LADA and other related government agencies here have been strongly supporting many initiatives to care for the environment of this island.

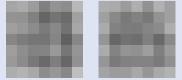
He further added that although government agencies always have huge parts to play in implementing environmental sustainability, it all boils down to everyone's role in making the biggest difference. Simple changes in everyone's daily lives can go a long way in contributing towards planetary wellbeing. These, for instance, can include the acts of walking more and driving less, planting trees, using both sides of papers, taking shorter showers, and using less electricity.

In spirit of the Earth Day celebration, it is thus hoped that all the participants of this webinar would continuously dedicate themselves in preserving the beauty of nature in each of their geoparks.





+ The response from the community to the event was wonderful with many watching and joining in from sea wall above Kathy Coley



#### Acknowledgements:

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