

### GGN Members

01-3<sup>rd</sup> International Geoparks Conference of UNESCO

08-Unesco international conference honours for Langkawi Geopark

09-Australia's first global Geopark is declared

11-Songshan Geopark enters into a twinning agreement with three global geoparks

13-GGN Office holds academic reporting conference on geoconservation

14-Attractive Summer Tour in Wudalianchi Global Geopark

15-Huangshan Geopark holds colorful activities on "cultural heritage day"

### 18-German Volcano Route in Vulkanland Eifel

19-Children at Volcano Experience Route Strohn

20-Day of open quarry 2008 Akdolit Pelm

22-International Photo Exhibition of Seasonal Scenes in Hexigten Geopark, Inner Mongolia Initiated

23-The Copper Coast Photography Competition

### Non-GGN Members

25-Jeju aims to be a Global Geopark

27-New plans to boost tourists and income for Cavan

29-"Wide Screen" Photographs Show Rondane Geopark

30-Geographical feature may boost Scottish tourism

31-Playing with the past

34-Protective Construction of Qitai Silicified Wood-Dinosaur National Geopark in Sinkiang

35-Asia-Pacific Seminar on Geological Conservation and Sustainable Development 2008

36-Gujarat's Jurassic Park all set to enter the world list

Sponsor: Office of the Global Geoparks Network

### **Editorial Board**

Director: Jiang Jianjun, Wang Guanghua

Deputy Director: Chen Xiaoning, Wu Zhihui, Li Jijiang, Yuan

Xiaohong

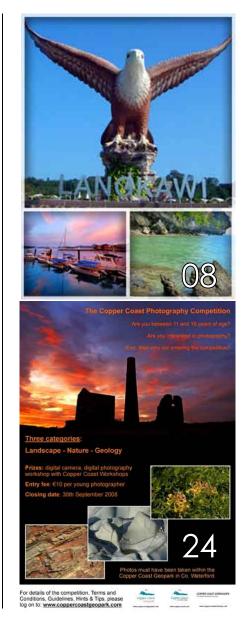
Consultant: M. Patzak, Zhao Xun, Chen Anze

Editors: Wu Zhihui, Luo Tuanjie, Li Hui

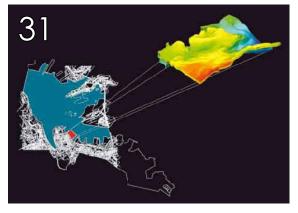
Address: 64, Funeidajie, Beijing, 100812, P.R.China

Tel: +86 10 66558777/8778 Fax: +86 10 66558613

E-mail: geopark@vip.163.com Website: www.globalgeopark.org









# International Geoparks Conference of UNESCO

■ Zhang Jianping China University of

Geosciences (Beijing)

www.globalgeopark.org **102** 



The 3rd International **Geoparks** Conference of UNESCO was convoked officially in Osnabrück, Germany at 11:00am, June 21, 2008, of which theme was "communication of geoheritage". **Approximately 300** delegates from over 60 countries across five continents were present at this conferenc.

# 1<sup>st</sup> Global Geoparks Fair

Prior to official start, the 1st Global Geoparks Fair took place at 11:00am, June 21, lasting to 18:00, June 22. Opening the event was Dr. Hans-Gert Pöttering, President of the European Parliament and Walter Hirche. President of German UNESCO Commission. The Fair was held in the Historic Market Place where white temporary tents were used as exhibition booths. All geoparks everywhere displayed the elaborate wall pictures, tourist albums and promotion pictorials to show their own merits. Peculiar geological landscapes and abundant tourism resources attracted lots of local residents and tourists.

### **Public Geopark Party**

### and Inaugural Evening Reception

The host held a "public geopark party" from 19:00 to 22:00, June 21, at which the 'Hidden Fermanagh' band from Enniskillen. Northern Ireland performed the Irish folk music.

All participants, altogether around 500 persons from over 60 countries across five continents, shifted to the main conference hall ----Stadhalle, Convention Hall ---- after the 1st Global Geoparks Fair was ended in the evening of June 22 when the host held an inaugural evening reception in the castle of University of Osnabrück. The mayor of Osnabrück, Boris Pistorius, delivered an address of welcome.



## Opening of the 3<sup>rd</sup> **International Geoparks Conference of UNESCO**

Before official opening of this conference, Prof. Zhang Jianping from China University of Geosciences (Beijing), on behalf of the director-general of Department of Geological Environment of Ministry of Land and Resources (MLR), P.R.C., Jiang Jianjun, called upon the president of Organizing Committee of this conference. Dr. Escher, the official of Global Geoparks Section, Dr. M. Patzak, the valuators of global geoparks including N. Zouros from Greece, P. McKeever from UK, I. Komoo from Malaysia, the former valuators of global geoparks including Eder from Germany, Jannochek from Austria

and Susan Turner from Australia and other people respectively; meanwhile, he submitted the congratulatory letter written by Director-general Jiang Jianjun and such materials as the Issue I and II 2008 of Global Geoparks Newsletter and the introductions to 20 global geoparks in China.

This conference was inaugurated duly at 10:00am, June 23. Firstly, the president of TERRA.vita Global Geopark, L. M. Hugo, addressed it to give attendant representatives everywhere a warm welcome. Upon his proposal, all representatives stood in silence for one minute to mourn lives claimed in the massive earthquake in Wenchuan County, Sichuan, China on behalf of members of GGN (Global Geoparks Network). Afterwards, Dr. M. Patzak from Global Geoparks Section of UNESCO, C. Ehrenbergerg, W. Wamhoff, A. Brambati, I. Komoo and N. Zouros delivered their addresses on behalf of UNESCO. Federal Ministry of Education and Research, Deutsche Bundesstiftung Umwelt (German Environment Fund), International Union of Geological Sciences, Asian-Pacific Geoparks Network and European Geoparks Network respectively. At last, the chief editor of Germany National Geography, K. Liedtke, the executive director of International Year of Plant Earth, Dr. E. de Mulder and other representatives made thematic speeches.

### Award plaques to certify **Global Geoparks Status**

The global geoparks recognized in recent years had been awarded large ceramic plaques to certify that they have been awarded Global Geopark status.

### **Academic Session**

The academic session of this conference was initiated duly at 1:45pm, June 23. All attendant experts and scholars expounded their own views on the conference objective, i.e. "creation of appropriate approaches for a boost in people's knowledge of geoheritage". The participants in this academic session included governmental officials from





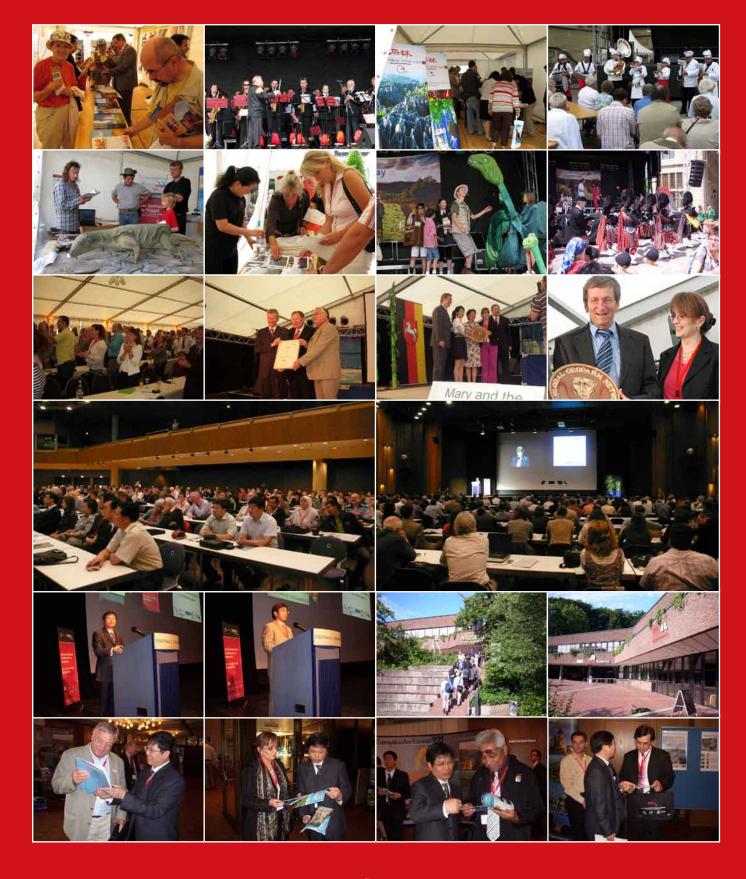


- White temporary tents in Osnabrueck market
- 2 Presentation of Hexigten Geoparks
- 3 Presentation of Zhangjiajie Stone Forest Geoparks
- Delegates read the Global Geoparks Newsletter

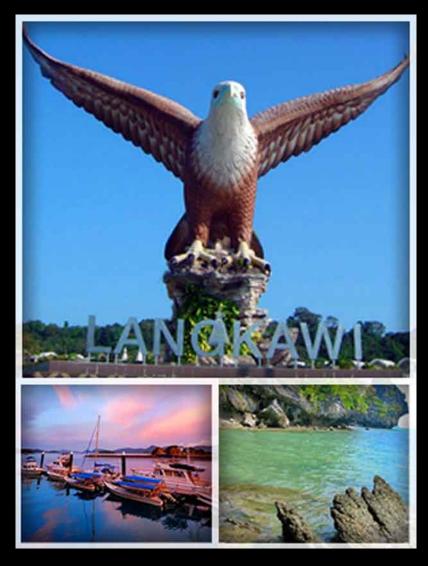
countries, management and staff from geoparks, experts and graduates from universities and research institutes and practitioners in such fields as tourism, education and cultural heritage. This academic session was held in four conference halls, focused on the following four subjects:

- How best to communicate the fascination of these topics to a wider public?
- How to integrate them in tourism offers?
- Can they enhance regional development?
- What is the task of the Global Geoparks in this process?■





# Photoes



Unesco international conference honours for Langkawi Geopark



**Geopark** will host the fourth biennial **Unesco International** Conference on Geoparks in 2010.

It beat two other bidders, Araripe Geopark of Brazil and Lesvos Petrified Forest Geopark of Greece, to host the event.

The bidding was held at the closing of the third biennial conference in Osnabruck in Germany on Thursday(June 25).

Langkawi Development Authority (Lada) general manager Datuk

Kamarulzaman Abdul Ghani said the achievement strengthened the resort island's position in the nature, eco-tourism and geo-tourism world map.

"It is a recognition that Langkawi Geopark is among the best in the world," he said in an SMS text message from Germany.

The first international conference was held in China in 2004, followed by Belfast in 2006, and Osnabruck from June 22 to June 26 this year.

He said the 2010 biennial conference, which allows participants to exchange ideas on development of geoparks on a global scale, would provide opportunities to interested countries to establish geoparks.

"It is poised to attract some 500

participants from 40 countries," he said.

Langkawi was accepted as part of the Unesco global network of geoparks on June 1 last year.

Geoparks are nature parks where emphasis is given to geological features, biological diversity, management, as well as socioeconomic development for locals living in the designated parks.

Langkawi Geopark, which hosted the first Asia Pacific Geopark Conference last November, has been given the task of leading the formation of the Asia Pacific network of geoparks. ■

1 Langkawi geopark



ustralia
has joined
Europe,
Asia and
South
America in have its very
own United Nations
sanctioned Global
Geological Park, or
Geopark.

The Kanawinka Geopark stretches from Naracoorte in South Australia's South East through to Colac in South West Victoria - which was an area of significant volcanic activity.

Since 1998, the United Nations Educational, Scientific and Cultural Organisation (UNESCO) has declared 57 geoparks - which are considered areas of scientific, geological, cultural and socioeconomic significance.

By becoming a geopark, local governments in South Australia and Victoria have agreed to

management plans for the area to be developed in a sustainable manner and will also promote education of the area's environmental significance.

Joane McKnight from the Kanawinka Geopark's board, was notified of UNESCO decision last night.

She told ABC News that the community has campaigned for the listing for more than two years and it will make it much easier to conserve and promote the area.

"We get global recognition. We get a major branding to use with the global recognition logos and our programs that we're working on now can work under the UNESCO endorsed label," she says.

"This is global recognition we've been working two and a half years towards and the UNESCO recognition is recognition for areas of geological significance that have human activity going on around them if you like, economic development."

Kanawinka is the aboriginal meaning for "the land of tomorrow" but this area of Australia is considered an important part of understanding the history the earth's development.

During an inspection of the proposed Geopark area in June last year, UNESCO scientists were very impressed with the ecological significance of the area, even though its enormous compared to geoparks in other parts of the world.

They also commented on the number of volunteers who worked in the area, not only to conserve the natural environment but also to provide services for tourists.■

- 1 Kanawinka Geopark in south west Victoria.
- 2 Surrounded by farming and residential areas, Mount Schank, which is south of Mount Gambier, is now a part of Australia's first global Geopark declared by the United Nations.





Australia's first global Geopark is declared

elegates from Songshan Geopark attended the 3rd International Geoparks Conference held in Germany in the last ten-day period of June. During this conference, Songshan Geopark entered into a twinning agreement with three global geoparks, i.e. Langkawi Geopark-Malaysia, Bohemian Paradise- Czechoslovakia and Sobrarbe Geopark-Spain.

It is required for both parties of the twinning agreement to initiate multiform exchange and cooperation in the geopark-related education, research, conservation, development, tourism and other fields on the basis of the principle of friendship and mutual benefit. It also obligatory for the management of both parties to often keep in touch with departments concerned in order to negotiate about the affairs of mutual exchange and cooperation as well as common concerns and accelerate mutual prosperity and development.





### Songshan Geopark

Located in DengFeng City, Henan Province and covers an area of 464 Km2. From west to east, the Songshan Geopark stretch across the Ampere of slope mountain, Ma An mountain , Five Fo mountain, Dan yang mountain, Shaoshi mountain, Taishi mountain and all the Five fingers ridge peaks. These hills rise straight up standing erect, capture a field vacating heaven, peaks rising one higher than another and grand and magnificent.

In the structure of the earth, Song Shan mountain lives in the Southern fringe of North China old land and in the range of the park ,it continuously completely has revealed for 3.6 billion years five geologic history time stratum, the order of stratum is clear, structure movements and expression is representative. Song Shan mountain is called Five generations living together by the world of the geology and in fact, it is a volume of entire the earth history stone book

### Langkawi Geopark

Made-up of the 99 islands, including the flora, fauna, geological and landscapes, the Langkawi islands have been especially identified for the geological, archaeological and ecological heritage, including the 400 million-year-old rock formation and mangrove forests.

Some of the amazing rocky structures in Langkawi Geopark, such as the barren and exposed karstic hills can only be observed from afar as the irregular



# Songshan Geopark er agreement with three



terrain makes it difficult and rather treacherous to explore. Langkawi generally, and the eastern geopark area in particular, have coastal landforms that are distinct from other coastlines in Malaysia. This is due to the diverse geology of the region, which is very much influenced by the ravages of sea, rain and waves, besides bioerosion



# iters into a twinning global geoparks

caused by marine life. All of these have resulted in unique formations including caves and steep serrated rocky edges that over time have collapsed into the sea leaving vertical and overhanging cliffs.

### **Bohemian Paradise**

The Bohemian Paradise is situated nearly one hundred kilometers to the northeast from Prague. Geographically it is demarcated by a borderline connecting Mnichovo Hradiste, Sychrov, the hill Kopanina, Zelezny Brod, Semily, Lomnice nad Popelkou, Jicin, Sobotka and Mnichovo Hradiste. This picturesque area borders on foot-hills of the Giant Mountains in the east and is marked off by the belt of the Jizerské Mountains and the Giant Mountains in the north. In this romantic area, that is situated on the middle part of the Jizera river, variety of nature beauties is bound with rich historical buildings: castles, chateaux and folk architecture. Exactly it was the reason why the guests of the Sedmihorky spa started to call it the Bohemian Paradise already in the 19th century.



### SOBRARBE GEOPARK

-The Geological Park of the Pyrenees With a surface area of 2,202 km2 the Sobrarbe territory is located in the Alto Aragón (Huesca, SPAIN), in the central zone of the southern slope of the Pyrenees and is bordered by France along the north.

Main Geological Heritage:Old mining activities of metal ores were located in the high Palaeozoic mountains in the northern part of the region, where glacial activities took place during the Quaternary (moraine deposits or glacial lakes called "ibons").

Further south younger rock units of Mesozoic to Paleocene age form the roughest mountains of the Ordesa and Monte Perdido National Park. As a result of the subterranean circulation of water, the region has one of the most visited karstic system of Europe.

■



- Signing agreement with Bohemian Paradise Geopark
- Signing agreement with Langkawi Geopark
- Langkawi Geopark
- Visiting Sobrarbe Geopark-Spain
- Behemian Paradise
- Sobrarbe Geopark-Spain



# GGN Office holds academic reporting conference on geoheritage

pon request of the GGN (Global **Geoparks Network)** Office, Ms. Cynthia Burek who was a professor of geoheritage from the University of Chester in UK gave an academic report on the British geo-conservation and geo-diversity in the Information Center of Ministry of Land and Resources, P.R.C. (MLR) on June 25. Relevant personnel from **Chinese Academy of Geological** Sciences, China Institute of **Environment Monitoring, Beijing** Fangshan Global Geopark, **Beijing Normal University,** Information Center of MLR

listened to this report.

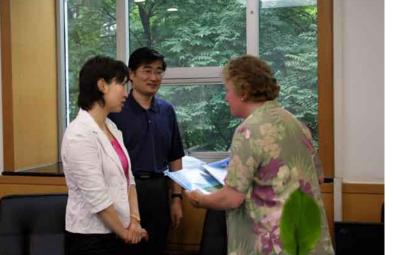
The reporter, Ms. Cynthia Burek, was a professor engaged in the teaching of geo-conservation and had the working experience of many years in the research of British geo-conservation. She traveled to China this time for the purpose of a field investigation on the geo-conservation in China, especially on karst geoparks. She hoped that she could integrate the contents concerning geo-conservation in China into her courses so as to teach them to more British students.

Prof. Cynthia Burek, by means of pictures and accompanying essays, introduced the basic conception and

philosophy of geoconservation as well as the history and status quo of geo-conservation in UK; moreover, she gave her own ideas of the geoconservation work. In this reporting conference, Prof. Cynthia Burek showed brochures, books, articles and other materials related to the geoconservation in UK to make listeners know some good philosophies and practices of UK in this field. At the same time, she also pointed out that since most of people were not interested in geology at all, the brochures related to geoconservation should be popularized, understandable, differently expressed in relation to different crowds and distributed free

through diverse channels such as schools, supermarkets and cafes in order to strengthen everyone's awareness of geo-conservation.

In addition, Prof. Cynthia Burek investigated the Shihua Cave (Rock Flowers Cave) and other karst landscapes in Fangshan on June 24 according to the arrangement made by the Construction and Management Office of Fangshan Global Geopark. She said that the karst landscapes in Fangshan were so ample and beautiful that she desired for another comprehensive survey on this geopark in the near future.





ollowing a lively festival of holy water. the summer tour in Wudalianchi Global Geopark was heading for its most enjoyable and pleasant stage. In recent days, everyone who had been to Wudalianchi exclaimed, "How immensely it has been changed!" RMB 25,000,000 has been invested in the urban reconstruction and the upgrade of scenic spots in Wudalianchi Scenic Area since April, 2008. To date, all infrastructure projects have been finished one by one.

The tourist plank road was stretched along the vent of volcanic summit of Mount Heilong to satisfy tourists' wish of "one dream coming true after a tour around volcanic vent once". The tourist plank road and bridge were extended vertically to over 3000 meters in the Longmen Rock Village-Ancient Volcano Expedition and Sightseeing Area so that tourists could immerse themselves in the mysterious world of ancient ponds to enjoy the ecologically diverse flora community in relation to ancient volcano as well as the astonishing charm of rock village. Similarly, such tourist roads enriched the landscapes in so-called miniascape-style volcanic wonder, i.e. Wenbo (Lake Wen), where mirror-like bright water surfaces were acclaimed as the acme of perfection.

Night lightened up here. Scenic spots were reconstructed as an emphasis in Wudalianchi Scenic Area this year in order to build up a world-class tourism brand. Its management committee, for example, invested heavily in the upgrading reconstruction of Beiyaoquan (North Medicinal Spring), reconstructed gates of the scenic area, and greened and brightened all landscapes to make night here not dark any longer. Furthermore, for the purpose of scenery-oriented construction of urban roads, tourist roads were reconstructed and upgraded acrossthe-board within the scenic area. for instance, the road leading to the volcano was turned into a green passage integrating transport, leisure and sightseeing.

### Wudalianchi ---- Health **Paradise of Tourists**

Wudalianchi has so far become the second "home" of tourists out of Heilongjiang Province. Even thought it is commencement of June, the scenic area welcomed batches of "resident population" who would stay here for three months at most and ten days or half a month at least. The "resident population" resided

in family hotels for relaxation and holidav.

Local residents run many family hotels in which tourists may not only take a hot bath but only taste meals cooked by themselves. It was said that Zhang Zhicheng, the operator of Quanhu Hotel, knew the Chinese health care. He said that his family hotel covering 200-plus square meters and ten rooms were often completely packed notwithstanding slack season. This years, he refurbished his hotel and added lots of such programs as massage, cupping and Chinese health care to appeal to numerous tourists. A large number of farmers were on the road to fortune in dependence on tourism resources within the scenic area in recent years just as Zhang Zhicheng

# **Attractive Summer Tour in Wudalianchi** Global Geopark



# **Huangshan Geopark holds** colorful activities on "cultural heritage day"

une 14 was the third "cultural heritage day" of China, of which theme was "protection of cultural heritage by everyone and share of protection results by everyone". Huangshan Geopark held a series of activities in order to further boost people's recognition of the importance of cultural heritage protection, popularize the knowledge of cultural heritage protection, intensify the awareness of cultural heritage protection and enable visitors and working staff in Huangshan Geopark to share the results of heritage protection.



Firstly, publicity banners were hung at considerable conspicuous locations within the scenic area and rolling slogans of cultural heritage protection were displayed on display screens so as to create an ambience of "cultural heritage day" activities.

Secondly, the activity of online examination and team contest about "exploration of global geoparks and entry into world heritage" was going to be initiated among members of the Communist Youth League across the city.

Thirdly, the management institution of Huangshan Geopark delivered a vivid knowledge lecture on the protection of world cultural heritage in Huangshan to pupils in Luocun Elementary School, Tanjiaqiao ---joint educational base of Huangshan Global Geopark and Huangshan world heritage protection.

Fourthly, the thematic activity of cultural heritage day proceeded in Huangshan Square. Multitudinous visitors were enthusiastic about it to carefully answer the questions about basal knowledge of cultural

heritage.

Fifthly, visitors were directed to visit the exhibition hall of culture in the museum so that visitors could acquaint themselves with the publicity exhibition of Huangshan's cultural heritage. Furthermore, the promotion video of protection results of Huangshan's cultural heritage was presented to spectators overseas through the CCTV International, i.e. CCTV-9. Fifthly, visitors were directed to visit the exhibition hall of culture in the museum so that visitors could acquaint themselves with the publicity exhibition of Huangshan's cultural heritage. Furthermore, the promotion video of protection results of Huangshan's cultural heritage was presented to spectators overseas through the CCTV International, i.e. CCTV-9.





- An expert is delivering a knowledge lecture to pupils
- Staffs of Huangshan management committe give the answer about Nature Heritage for Toursit
- Visitors are visiting the Huangshan museum
- 4 Publicity banners are being hung at conspicuous locations within the scenic
- 5 Visitors are enthusiastic about the thematic activity of cultural heritage day







# German Volcano Route in Vulkanland Eifel

The VULKANLAND EIFEL national geopark invites school classes, bus groups, families and visitors interested in geology on a discovery tour of the 280 km long "German Volcano Route".

The signposted excursion route connects 39 geological sites of cultural and industrial historic interest, all related to the Eifel volcanoes.

The visitor will gain access to a whole host of volcanic remains including craters, cinder cones, lava flows, domes and numerous sputtering volcanic sources.

The fiery natural heritage is presented visually and clearly in museums, information centres and mines. With the activities on offer including swimming in a crater lake, visiting a volcanic museum, mountain-biking, stonemasonry courses and walking along a variety of geological routes, VULKANLAND EIFEL will provide experiences for the whole family.

A number of car-based excursions provide visitors to the national geopark with the opportunity to gain an insight and an understanding into the history of the origins of Germany's youngest landscape and the lives of people from and connected with this volcanic heritage.



# Children at Volcano **Experience Route Strohn**



n June this year a new volcanological pathway was opened to the public. It is called "Volcano experience path". Since then this pathway of 3,5 km was used by many groups of adults and children listening to the explanations of a geopark-guide. The small village of Strohn is now able to offer a complete geotourism package comprising the museum "Volcano house" for indoor and the new "Volcano experience path" for outdoor activities. ■

- 1 Children at Volcano Experience Route Strohn
- 2 Children are fascinated by volcanic rocks. Geopark rangers take children into the quarried volcanoes and tell them the stories of igneous rocks. This is one of the special activities in the frame of "Geo for Kids".







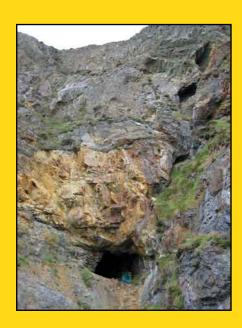


# Day of open quarry 2008 **Akdolit Pelm**

local excavation company opened its doors for one day to let the public go inside a lime stone quarry. Excursion, outdoor games for children, music, beverage and food were offered in this fantastic geological site that gives an insight into a fossilized reef of the middle Devonian time.





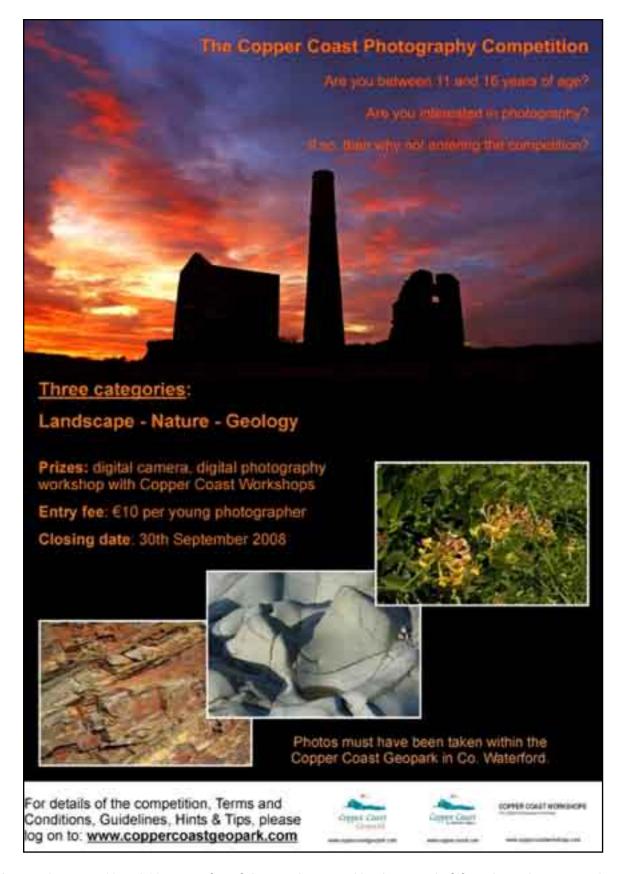




# The Copper Coast Photography Competition







Are you between 11 and 16 years of age? Are you interested in photography? If so, then why not entering the competition?3 categories: Landscape, Nature, Geology

> Prizes: digital camera, digital photography workshop with Copper Coast Workshops Entry fee: €10 per young photographer Closing date: 30th September 2008

> > Details to download From Copper Coast Website: http://homepage.eircom.net/~ccgeopark/Competition.htm





# to be a Global Geopark





# New plans to boost tourists and income for Cavan

■Author: Tom Carron and Sean McMahon

avan is in pole position to benefit from millions of euro of investment if appeals in support of the Castlesaunderson Scouting Project and a geopark in the Cuilcagh Mountains are successful in the coming weeks.

The county council is hopeful that the EU Special Programmes Body will look positively at the application by the partners of the All-Ireland Scout Jamboree, according to the director of services, Seamus Neely. He revealed that a number of evaluations on the project had taken place, including a significant one announced last week. The EU Body has now recommended the project to the institutions that will make the decision on formal approval.

"It's fair to say that final approval has not issued yet, but a significant advance has been made on the way to such a decision," said Mr. Neely. "But we shouldn't pre-empt that final decision, which will be forthcoming in the next few weeks."

There was good news for on Jun. 23, when county councillors heard that Cavan and Fermanagh were joining forces to send a formal application to UNESCO, seeking recognition for a cross-border geopark stretching across the Cuilcagh Mountains and incorporating the Marble Arch Caves and the Burren area of west Cavan - an area with huge geological and historical importance.

The county manager, Jack Keyes, said that UNESCO will adjudicate on the application during the summer, and if the verdict is positive the next step would be to develop the various sites in association with An Coillte.

The project offered Cavan a

landmark attraction with benefits for the entire county, Mr. Keyes told the June meeting of the council. "It will be the first cross-border geopark in the world. Work is already is under way, with the provision of new signs, mapping and the making of the area more accessible to people," he said.

Senior figures from Fáilte Ireland North West were at the meeting to give the geopark idea their backing. The chairman, Pascal Mooney, and the acting chief executive, Martina Bromley, also assured the council that in the tourism plan for the region, Cavan was at the centre of the action. They acknowledged that, while in the past Donegal had been dominant in the region because of its established tourism industry, the situation was changing and the lakeland counties were coming to the fore in terms of their unique strengths as places for a wide range of holidays and sporting pursuits.

At the meeting of Belturbet Town Council on Monday, Cllr. John Scott welcomed the news on Castlesaunderson, pointing out that it would be the most significant development to take place in the area for some time. He said that he and his scouting colleague, Seamus O'Reilly (regional commissioner), had been working on the project for the past two years, and he complimented the county manager, Jack Keyes, Mr. Neely and the Scouting people in Dublin for their work on moving the project forward.

Cllr. Anthony Vesey acknowledged the consistent support of Minister Brendan Smith, saying he looked "forward with confidence that the necessary final approval will be forthcoming in due course,". Cllr. Seamus Fitzpatrick said "we must win on this occasion. I look forward to rapid progress in relation to the approval process."

Mr. Keves told the Anglo-Celt that Cavan County Council had played a pivotal role in advancing the application for funding: "It is acknowledged that progress to date has been satisfactory and we will be redoubling our efforts over the coming months to convince all concerned of the worth and viability





of our proposal," he said.

Other major tourism-related projects mentioned at Monday's meeting were Rally Ireland, a stage of which will use the roads around Glangevlin and Blacklion in January 2009, and the extensions of the Shannon Erne Navigation to Killykeen and of the Shannon Navigation to Dowra. Mr. Mooney said a full re-opening of the Ulster Canal from Lough Erne to Lough Neagh would bring increased tourism traffic to Cavan, and suggested that St. Angelo Airport at Enniskillen could be an important entry hub for this region.

He informed the meeting that the north west attracted 1.5m visitors who spent €366m in 2007; two thirds were Irish and the remainder from overseas. Cavan attracted 100,000 overseas visitors who spent €35m in 2007.

"It emphasises the vital importance that tourism is to the economy here in Cavan, which has unique characteristics in terms of its attractiveness for angling holidays." He suggested interest groups in the area could hold one large festival. which Fáilte Ireland could back, though it has a limited budget of about €150,000 out of which it gives grants to a substantial number of small festivals. ■

# "Wide Screen" Photographs Show RONDANE GEOPARK



ondane Geopark has spectacular glacial deposits that are fascinating to the specialist. In order to reach the wider public, "wide screen" photographs have been created by Bjørn Follestad and exhibited at the National Park Museum at Folldal.

Norwegians have been inspired by Rondane for centuries – in visual art, music, literature and research. This is the place the composer Edvard Grieg found the inspiration for some of his well-known romanticnationalistic compositions. Other artists, such as the painter Harald

Sohlberg, captured the uniqueness of the landscape and the blue light, so characteristic for Rondane.

When the Ice Age released its grip on Norway 10.000 years ago, it left numerous marks in the landscape. These make it possible for us to explain how the landscape was shaped. The interaction of nature, art and culture makes Rondane one of the finest destinations when it comes to theme-oriented tourism – geotourism.

Our country has a long geological history of crustal folding into mountain ranges succeeded by erosion of the mountains. Even

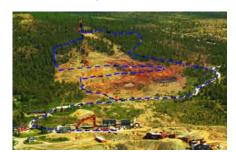
though the origin of the mountains is often as old as several hundred million years, the land formations are young in a geological sense. The approximately 50 million years old mountain massifs of Høgronden and Rondslottet represent the oldest formations. At that time Rondane was close to the equator. The mountain plateaus of today are situated at about 1100-1200 metres above sea level, which was the sea level at that time. The continental plates drifting to the north, as well as the crustal folding, caused renewed erosion by the rivers at that time. Great valleys, such as Østerdalen and Gudbrandsdalen, as well as their adjoining valleys, were shaped by river erosion before the ice ages started two million years ago. During the ice ages the mountain tops in these areas where sculptured by bottom glaciers. This has given Rondane several "botns" (circular valley formations in the mountain sides). In spite of glacial



erosion it is the course of the old river valleys that characterizes the valleys in the landscape.

Ice movement to the northeast and north shows that the highest point of the inland ice was to the west and south of Rondane. Because of this, the glaciofluvial water ran north, on-top of, through and under the inland ice at the end of the Ice Age. Characteristic features such as drainage channels and terrasses formed along the ice margins. Large deposits of different kinds of debris were deposited by the inland ice. It is these deposits, together with the drainage channels, that give us the unique nature environment we can see in Rondane today.

All this, together with culturehistorical impressions, is on display and can be experienced in the Rondane Geopark.■



# Geographical feature may boost Scottish tourism

ourism professionals in the north-east of Scotland are hoping to use one of the region's geographical features to attract more tourists to the area.

According to the Press and Journal, members of Stonehaven Tourism Group are seeking to make the area from Stonehaven to the Angus Glens, which contains the Highland Boundary Fault line, a Unesco Geopark site.

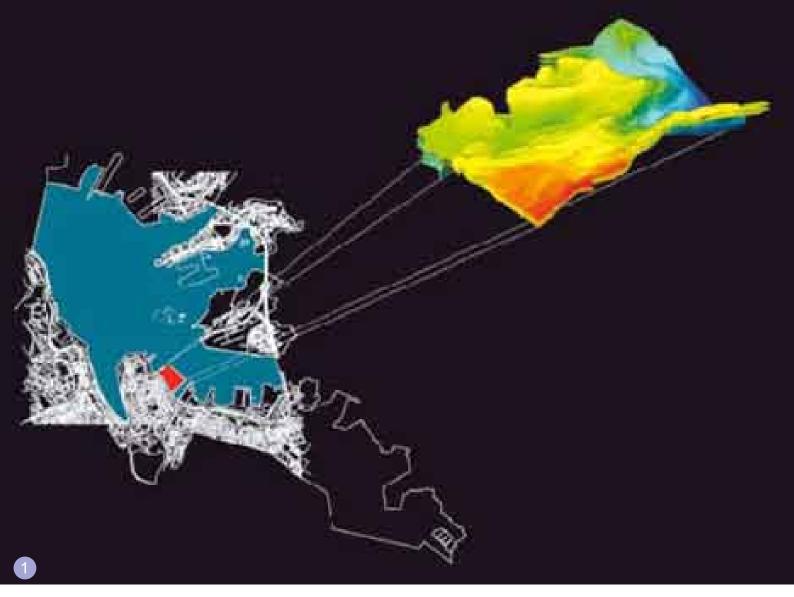
The line, which separates the Highlands and the Lowlands, has been described by experts as "one of the great tectonic structures of the British Isles", the publication reports.

Frank Budd, Stonehaven Tourism Group's chairman, said making the area a Geopark site - of which there are currently under 60 worldwide would help attract visitors, especially walkers and school parties.

Sally Wallis, a spokeswoman from VisitScotland, told the publication: "Attaining Geopark status would be great news for Stonehaven from a tourism perspective, and raise the profile of the area's geological importance in terms of scientific quality, rarity, aesthetic appeal and educational value."

The Global Network of National Geoparks, which was launched in 2004, includes 57 sites in 18 countries.■





# Playing with the past

his facility recreates the way the Troll reservoir in the North Sea looked when it was exposed to the open air and the dinosaurs still ruled the Earth.

It has been designed as an "experience centre", offering plenty of opportunities for play and relaxation along with understanding and learning.

"We want to stimulate people's curiosity," explains Finn Krogh, director of the NPM. "They can

come here to have fun, and will hopefully also want to know more."

The Geopark project forms part of Stavanger's year as a European capital of culture, and accordingly represents a temporary installation.

### **Explained**

The landscape of the Troll reservoir can naturally be explained in PowerPoint presentations and spreadsheets. But that is largely for internal use. Ordinary people do not turn up in conference rooms to

study boring animations.

"This park will provide a completely different route to comprehension," reports Geir Mossige Johannsesen, the NPM's exhibition and communication manager.

"It offers so many layers of information – on geology, seismic surveying, well technology, pipeline systems, oil and gas production, and the connection between erosion and deposition."

### **Challenges**

The Troll field is being reproduced in a 1:500 scale on the quayside square which fronts the NPM. That has posed both educational and architectonic challenges.

A lot of the materials employed

Young and old in Stavanger will soon be able to stroll around a landscape 150 million years old when the city's new Geopark opens alongside the Norwegian Petroleum Museum (NPM).



have been obtained directly from the oil industry. Re-use creates a sense of proximity. The park will have a robust image – there has to be smell of oil and the rust must be real, because that is how things are offshore.

Mr Krogh and Ms Stangeland believe that a park which offers interactive experiences will teach visitors more about the industry.

Given that 2008 is also the International Year of the Planet, a geology lesson would seem to be very appropriate.

Everyone will be able to stroll around, look and wonder, sit

down with a cup of coffee or find a shelt-ered spot and let their thoughts wander while youngsters enjoy a skateboard ramp created from a fault surface on Troll.

"This is a place for all," says Ms Stangeland. "Youngsters will be allowed to organise much of their own activity. At the same time, it provides a venue for festivals and performances. Imagination is the only limit."

The budget for the Geopark is more than NOK 7 million, with the city council and the Stavanger2008 project providing NOK 3 million each.■

 A scale model of the Troll reservoir has been installed alongside the Norwegian Petroleum Museum in Stavanger. (Illustration: Helen & Hard)

2 Due to open on 29 April, the Geopark will provide users with a realistic experience of the Troll field's "landscape". (Illustration: Helen & Hard)

3 The Troll model alongside the Norwegian Petroleum Museum (right). (Illustration: Helen & Hard)







# **Protective Construction of Qitai Silicified Wood-Dinosaur National Geopark in Sinkiang**



he protective construction engineering of Qitai Silicified Wood-**Dinosaur National** Geopark in Sinkiang is under construction, of which accumulative investment amounts to RMB 6,600,000.

The National Geopark, with a total area of around 58km2, is located 150km apart from the north of Qitai County, Sinkiang, There are altogether more than 20,000 petrified tree plants of silicified wood, of which one plant is 2m in diameter and 26m in length, lying on the ground like a gigantic dragon. It is the second largest petrified tree in the world.

Dinosaur fossils in excess of 120 are buried within the National Geopark. One of them ---- 30.4m long, 10m-plus tall and about 50t weighty ---- is the largest dinosaur fossil in current Asia.

The Moguicheng (Devil City) is 40km away from the northwest of the silicified wood sub-park, where fancy weathered architectures were



abundant and enjoyable.

The foresaid three landscapes have the extremely high value in aesthetics and research, thus the government of Qitai County devoted RMB 6,600,000 to the protective construction of the National Geopark this year.

The engineering was started in early April, comprising one geopark gate and one monument square at the entrance of the National Geopark, one minor monument each in Konglonggou (Dinosaur Ditch) and Moguicheng, one tourist reception center and one exhibition hall in about 700m2 (including 5 exhibition booths and 22 exhibition panels) inside the National Geopark, and 5 explanatory panels of traffic and geographical location and 20 introductory panels of landscapes in the scenic area.

The entire engineering is expected to be finished at the end of September. ■

# Hong Kong Convention and Exhibition Centre



An image of HKCEC after the second expansion (click the picture to view the new nomenclature of HKCEC effective on 1 March 2009)

The Hong Kong Convention and Exhibition Centre (HKCEC) opened in November 1988, after which Hong Kong's exhibition industry experienced a period of rapid growth enabling Hong Kong to establish its position as Asia's trade fair capital and a premier international convention and meeting location.

The HKCEC, located on the magnificent and renowned Victoria Harbour, is owned by the Hong Kong Trade Development Council (TDC) and the Hong Kong Special Administrative Region Government. The TDC is entrusted by Government to be responsible for the Centre's development, design and management. The TDC has contracted with Hong Kong Convention and Exhibition Centre (Management) Limited (HML) for management and operation of the Centre. HML is a wholly-owned subsidiary of NWS Holdings Ltd (Stock Code: 0659 HK). ■



# The HKIE Geotechnical Divis Asia-Pacific Seminar on Geol and Sustainable Developmen 13 August 2008 Room 601, Hong Kong Convention and

eology and rocks are the fundamental components of our natural environment and are also important elements to be considered in engineering projects. With increasing public concerns on protecting our environment and geological conservation, it is of paramount importance that engineers and other professionals shall exercise careful considerations in their works on balancing the needs of development and at the same time addressing general public's needs.

### Aims

This Seminar aims at bringing together the local and overseas professionals to impart on the geological conservation. Abstracts are invited but not



# ogical Conservation t 2008

## **Exhibition Centre**

limited to the following topics:

Engineers' role in geological conservation

Application of geological conservation in engineering

Promotion of geological conservation to engineers and other professionals

Geological conservation and environmental conservation

More information in the Global Geoparks Network: (http://www.globalgeopark.org/Portals/1/01-News\_ Events/080619HK.pdf) ■

# **Gujarat's Jurassic** Park all set to enter the world list

■Author: Jumana Shah

HMEDABAD: Gujarat's natural heritage is all set to make international news again. Raiyoli, the dinosaur fossil site near Balasinore, has been selected by the Geological Survey of India (GSI) as one of the two Indian sites it will propose for inclusion in UNESCO's list of geologically important zones.

Raiyoli will be entered under the World Heritage List of 'natural sites' that possess outstanding universal value.

Around 65 million years ago, Raiyoli was one of the world's three biggest nesting sites. It was also a part of the world's largest nesting zones in central India for dinosaurs. Hundreds of dinosaur eggs and thousands of fossils have been unearthed here in the recent past. In fact, the site is also believed to be one of the last habitats of dinosaurs before they became extinct.

The world's youngest dinosaur egg is believed to have been found in this site. Of the 10,000 dinosaur eggs excavated from India, more than 2,000 have been found from Gujarat. Highly placed sources in the GSI said the site is ideal for a geopark. The sources said that they have recommended that the government send an appropriate proposal to UNESCO.

Officials in the Gujarat tourism department confirmed that a team of senior paleontologists visited the site recently, and the tourism department is busy preparing a proposal for UNESCO.

"We have been asked to work on this project on a priority basis. There are all chances of receiving the sanction," a tourism official said. The formal announcement is expected to come early next year.

The other site proposed by the GSI is Saketi Fossil Park in Sirmur district, Himachal Pradesh. It is famous for the millions-of-years-old mammalian fossils. Besides securing global recognition and focused conservation for the site, funding is also expected to pour in for advanced systematic research, international tie-ups and tourism development.

Raiyoli is considered to be a part of the Shiva Crater caused millions of years ago by a meteor. Meteorites or volcanoes are believed to have destroyed the site. However, despite all natural disasters, experts said that the eggs have been very well preserved by nature.■

