



## Geotourism

Characteristics, Challenges & Opportunities

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Australia



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## Contents of Presentation

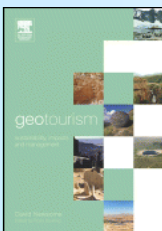
1. Characteristics
2. Challenges
3. Opportunities
4. Conclusions



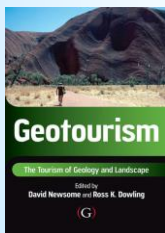
Wave Rock  
Western Australia 2

## Three Global Geotourism Books

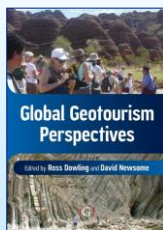
2006



2010



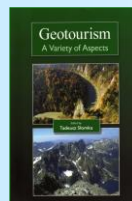
2010



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## Books

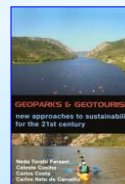
Poland



Jordan



Portugal



China



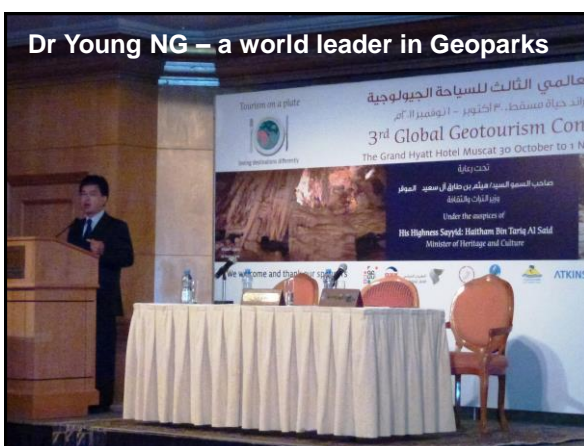


## Geotourism Conferences

**2008 - Australia**  
**2010 - Malaysia**  
**2011 - Oman**



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### Part 1 - Characteristics

The **environment** comprises the following:

- 1. Abiotic** – non-living aspects such as the climate & geology eg. landscape and landforms
- 2. Biotic** – the living parts eg. fauna (animals) and flora (plants)
- 3. Cultural** – past & present, non-living & built

Parts **B+C** are well interpreted within tourism, especially through ecotourism and cultural tourism, but **A** has typically **not** been addressed

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## Geotourism

Geotourism is a new type of tourism that:

1. Starts with, or is based on, the **A**biotic geological environment but also comprises **B**iological and **C**ultural elements
2. It is driven by tourism's sustainability focus meaning it has environmental, social and economic goals
3. Thus it can be used as a major tool for regional economic development

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## The Definition of Geotourism

Geotourism is sustainable tourism which focuses on an area's geology and landscape as the basis for providing visitor engagement, learning and enjoyment

Geotourism Subcommittee  
Geological Society of Australia

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Piton de la Furnace, Reunion Island



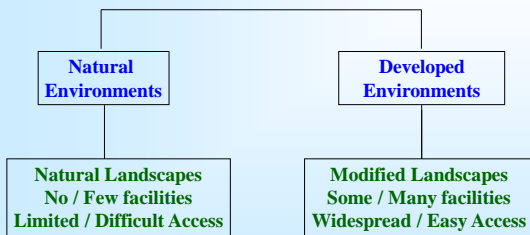
## Geotourism

The 'geological' underpinning of geotourism is that it specifically focuses on geology and the landscape. Thus it promotes the:

1. **Conservation** of geodiversity
2. **Understanding** of earth sciences
3. **Experiences** of geosites

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## Geotourism May Occur in Both Natural and Developed Environments



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## Geoproducts

Using Malaysia as an example, geotourism occurs:

- In a **World Heritage Area** at Mt Kinabalu, Sabah, Borneo
- At a **Roadside Cutting** at Miri, Sarawak
- In the **Langkawi Geopark**, South east Asia's first

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## Mt Kinabalu WHA, Sabah, Malaysia



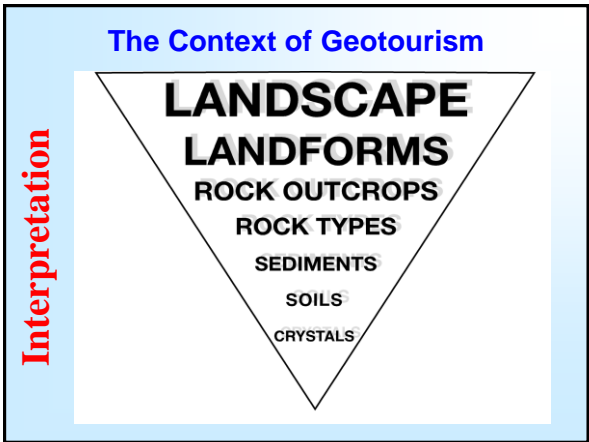
## Roadside Cutting Miri, Sarawak, Malaysia





## The Elements of Geotourism

1. It is based on geological features
2. It conserves geoheritage
3. It develops geological tourism products
4. It creates high quality tourist experiences
5. It includes excellent interpretation
6. It provides value to local communities

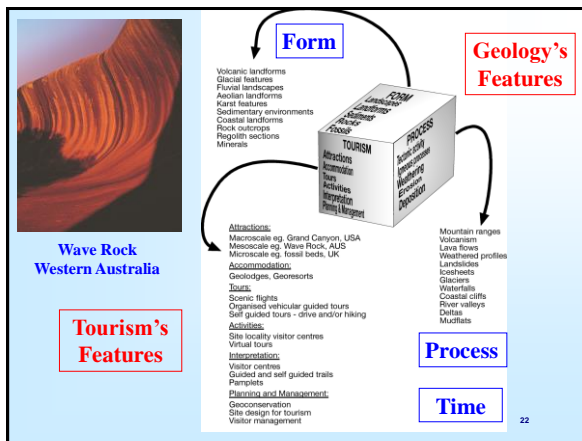


## The Interpretation of Geotourism

Interpretation separates geotourism from geology. The key elements of geotourism's interpretation include form, process & time

1. **Form** – an understanding of the landforms and other geological features
2. **Process** – a description of the ways in which the geological features were formed
3. **Time** – a description of the geological era and length of time the features were formed – always related to human time

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## Part 2 - Challenges

There are a number of challenges for geotourism. They include:

1. Emphasizing Geoconservation
2. Delivering Quality Products
3. Incorporating Risk Management
4. Interpreting Appropriately
5. Capitalizing on the Geoparks Brand

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## 1. Emphasizing Geoconservation

1. Geotourism fosters an understanding of geoheritage protection and conservation
2. The Association for Geoconservation, Hong Kong is a champion in this regard



3. The sustainability element of Geotourism ensures that geoheritage is conserved

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## 2. Delivering Quality Products

Today's tourists are educated, aware and informed. This means that geo-products need to be:

1. Of high quality
2. Include up-to-date information
3. Be interesting and innovative
4. Be engaging

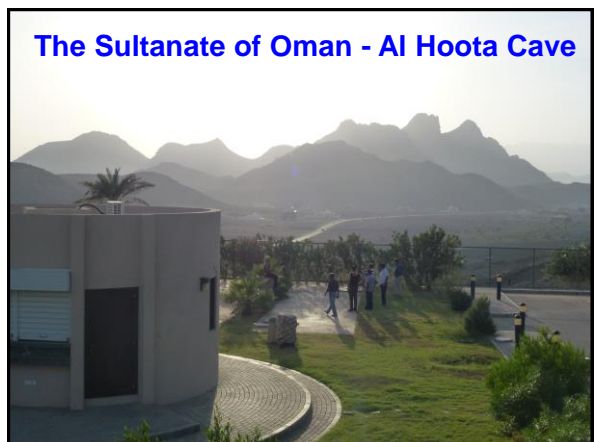
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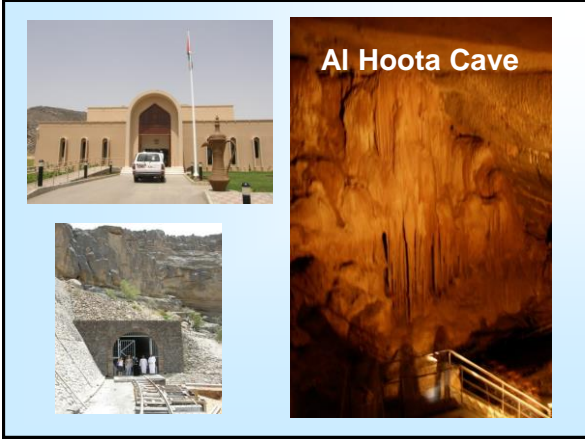


## Excellent Interpretation



## The Sultanate of Oman - Al Hoota Cave







### 3. Incorporating Risk Management

1. Tourists are travelling to more remote areas
2. Active volcanoes, glaciated zones, high mountains, hot deserts etc.
3. Therefore visitor safety is paramount
4. Risk Management Plans are essential for all geotours and geo-attractions
5. Risk Management is about protecting the geotourists, and the geosites

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### Galapagos, Ecuador



### Active Geotourism

### 4. Interpretation Excellence

Interpretation is about connection. It includes:

1. **Communication** – bringing items and events to life
2. **Learning** – in order to facilitate understanding by revealing meaning
3. **Values** - by stimulating an appreciation of heritage
4. **Action** – by involving or immersing people in their tour experience

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## Head, Heart & Hand

Excellent interpretation includes aspects of the head, heart and hand. That is:

**1.Head** – learning about the geology of an area and its form, process and time

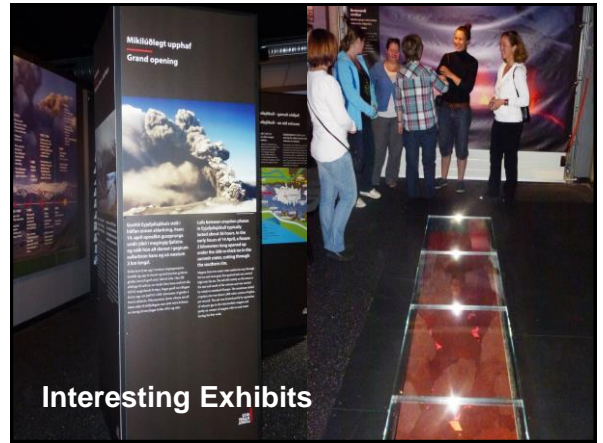
**2.Heart** – connecting the visitor to the landscape in a way that captures their heart


**3.Hand** – stimulates the visitor to want to do something for the environment through their new-found understanding and connection to the geological environment

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## Iceland - Eyjafjallajökull











## 6. The Geoparks Brand



- In **China** in the first decade there were over 1.1 billion visitors to geoparks (over 100 million visitors per annum)
- Entry fees were RMB 7 Billion (**HKD 8.85 B**)
- The geoparks generated 75 000 permanent full time jobs and 470 000 part time jobs
- In the **United Kingdom** the contribution of seven geoparks is £18.84m (**HKD 236m**)



UNESCO Protected Areas			
Program		Sites	Countries
World Heritage		981	160
Man and the Biosphere		621	117
Geoparks		100	29

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### Part 3 - Opportunities

There are a number of opportunities for geotourism. They include:

1. Developing **Urban** Geotourism
2. Providing the **geological base** for existing environmental tours and attractions
3. Providing a **spectrum of tours** for visitors from the dedicated geological tourist to the mass tourism visitor
4. Developing **geological trails and attractions**

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Portugal - Porto  
Urban Geotrail



Iceland - Selfoss  
Urban Geotrail

## USA – Grand Canyon The Trail of Time

The Trail of Time is the world's largest Geoscience exhibition at the world's grandest geologic landscape

It is a 4.56km long trail marked at every meter with 1 m = 1 million years of earth's 4.560 m year long geologic history

It is also supported by an electronic 'Virtual Trail of Time'

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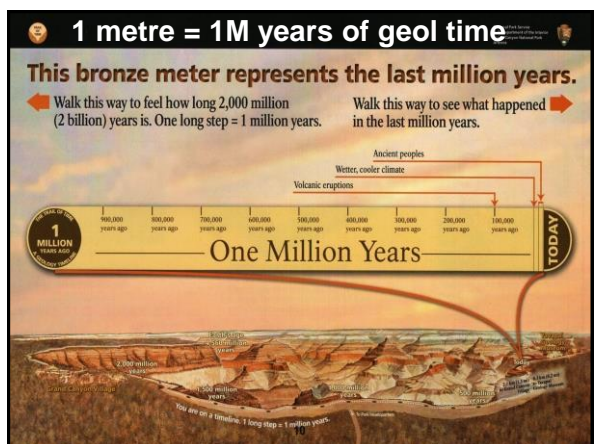


The Trail of Time

## Brochures



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Trail Markers



Trail Panels

Trail Sight Scopes



**Iceland**  
**The Bridge Between Two Continents**  
**Geotourism Attraction**

**Brúin milli heimsálfu.**  
**Bridge between Two Continents**

**Straddling the Mid Atlantic Ridge**  
*Left: North America – Right: Europe*



**Conclusions**

- Geotourism contributes to sustainable development
- Its fosters geological conservation, awareness and appreciation
- It helps build local communities
- It contributes to regional and national economic growth

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**Geotourism is a vehicle for Economic Development**  
 eg. Iceland

*Attraction*  
**Visitor Centre**



**Guðný**

*Amenity*  
**Café**



**Helga + Arnór**

*Tours*  
**Geotour**



**Kristbjörg**



世界地貌岩石保育協會  
 Association for Geomorphology, Hong Kong



APGC  
 Asia Pacific Geotourism Conference



HONG KONG  
 GEOPARK  
 香港地質公園

**Geotourism**  
 Characteristics, Challenges & Opportunities

**多謝**  
**THANK YOU**



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