The UNESCO Global Network of National Geoparks

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Introduction

IN JUNE 2000 REPRESENTATIVES OF FOUR EUROPEAN TERRITORIES, which had separately been promoting geological conservation and sustainable development, came together in Greece to discuss their common socioeconomic problems and how to address these problems through the protection of geological heritage and the promotion of geological tourism. The result was the signing of an agreement declaring the creation of the European Geoparks Network. The purpose of this new label was to provide a network within which to share information and expertise, and to define common tools in addressing the above objectives.

The Global Geoparks Network

From its formal beginnings in June 2000, the European Geoparks Network grew rapidly. One of the key early successes for the network was the signing of an official agreement of collaboration with the Division of Earth Sciences of UNESCO (the United Nations Educational, Scientific, and Cultural Organization) in April 2001, which placed the new network under the auspices of UNESCO. Since then, UNESCO has played an important role in the development of the European Geoparks Network and has used the European model as the one to follow as they rolled out their Global Geoparks Network (GGN). As of August 2009, the GGN comprises 63 members in 19 nations, including 34 in Europe, 22 in China, 3 in Japan, and one each in Australia, Brazil, Iran, and Malaysia.

But what actually is a geopark? A geopark is not just a collection of geological sites, but is a territory with geological heritage of international significance *and* a sustainable territorial development strategy. Geological sites must be of international importance in terms of their scientific quality, rarity, aesthetic appeal, and education value. Sites cannot only be related to geology but also to archaeology, ecology, history, and culture. All these sites in the geopark must be linked in a network and constitute thematic parks with routes, trails, and rock sections that can benefit from protection and management measures.

Typical activities in a global geopark include the development of walking and cycling trails, the training of local people to act as guides, education courses, provision of informa-

tion signage, and the development of modern museums and visitor centers. The ultimate aim of a global geopark is to bring enhanced employment opportunities for the people who live there. These opportunities are now being realized across the expanding network and are being created in association with the conservation of geological heritage. However, this conservation is not of the restrictive type. Geoparks use a holistic approach to conservation where all aspects of natural and cultural heritage are valued, conserved, and promoted under the geopark label.

Geoconservation is implicitly expressed within the operational guidelines of the GGN through the strong statement that no destruction or sale of the geological value of a global geopark will be tolerated, except for scientific or educational purposes. Furthermore, a geopark has to develop and enhance methods and tools for the preservation and conservation of geological heritage, as well as to support and develop scientific research related to the various disciplines of the earth sciences. Education and training on the natural and geological environment comes as a direct consequence of conservation strategies and aims to promote knowledge and value of geological heritage, outlining the concept of geodiversity in the territory (Figure 1).

Sustainable development is considered as an essential practice for economic development in the territory and for the strengthening of the management structure and, therefore, for the geopark itself. Geological heritage is evaluated and considered from the inhabitants'

Figure 1. Sites such as Giant's Causeway in Northern Ireland demonstrate the geodiversity of the earth. Photo courtesy of Wesley Hill.



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perspective, presence, and needs. The contribution of the geopark is thus seen through the enhancement and promotion of a certain image related to the geological heritage and the development of tourism with related actions. This should have a direct impact on the territory, influencing its inhabitants' living conditions and environment, leading to a revalidation of the values of the territory's heritage, and encouraging active participation in the territory's cultural revitalization.

Finally, and crucially, a global geopark has to work within the network for its further expansion and cohesion, collaborate with other geoparks and local enterprises for the achievement of its objectives, and create and promote new by-products linked with geological and cultural heritage. In practice this is mostly done through regional networks such as the European Geoparks Network or the Asia–Pacific Geoparks Network (which was founded in November 2007).

Regional cooperation: The European Geoparks Network

Regional cooperation is best exemplified by the European Geoparks Network, which has been operating for nine years (Figure 2). One of the stated aims of the European Geoparks Network is to exchange ideas and expertise on promoting geological awareness and sustainable development. It is with this aim

in mind that the members come together twice per year. Once annually the network meets on its own, while on the second occasion the network meets a few days in advance of the annual meeting, which is open to everyone, members and nonmembers alike. These meetings promote the use of common tools such as the website (www.europeangeoparks.org), magazines, displays, and events, and also encourage members to develop exchanges or projects between smaller groups of geoparks (Figure 3).

Once a year all members participate in European Geoparks Week. This is a series of coordinated events (guided walks, talks, activities for children, etc.) that occur in the same week in every member of the network. The goal is to increase public awareness about earth science issues in general and build awareness of the European Geoparks Network and **Figure 2.** In Europe, the term "geopark" is the official designation for 33 areas in 13 countries. Map courtesy of the European Geoparks Network.



The George Wright Forum



Figure 3. A geopark is a marketing and branding strategy centered on earth heritage. The European Geoparks Network uses a website, logo, brochure, and magazine to create a unified destination image for members of the network. Images courtesy of the European Geoparks Network website.

our great shared geological heritage. Not only is the public in one geopark informed about activities occurring there but they are made aware of the fact that they are part of a much wider series of events that will be happening across Europe.

Transnational networking and sharing of knowledge will mean new concepts, outputs, and results for further integration on spatial planning, transnational environmental problems, and development issues. The creation of quality standards for geoparks services and products is one of the key aims of the network. As part of this, an evaluation process has been established that will try to measure the level of quality in infrastructure, services, and sustainable management in each member of the network. The process will be repeated every four years to ensure that the level of quality remains of the highest order.

The network continues to expand, drawing in new expertise and knowledge from all parts of Europe. With the other global partners in the GGN, the members will continue to assist UNESCO in bringing the geopark concept to all parts of the world, especially to the developing world where sustainable tourism could lead to job creation in rural communities for the benefit of local people.

Socioeconomic development: The case of Marble Arch Caves

In the far northwest corner of Ireland are the Marble Arch Caves. The caves are located in County Fermanagh, which covers an area of 1,692 sq km and is home to 57,000 people, most of whom live in the county town of Enniskillen. The economy of Fermanagh is based on agriculture, mostly on beef, dairy, sheep, pigs, and some poultry products. Tourism too is important, with the county often referred to as Ireland's lake district. However, tourism is

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much less developed here than in, for example, the southwest of the country in counties Cork and Kerry, and much of the tourism potential of Fermanagh is yet to be realized.

The economy of Fermanagh, like the rest of the north of Ireland, was until recently blighted by political violence and instability. At the height of the unrest the local authority, Fermanagh District Council, made the strategic decision to develop the caves at Marble Arch into a tourist attraction. Recognizing the need for the caves to offer something special in order to attract visitors into the area, a policy of conservation and sustainable development was employed from the start. Opening in 1985, the caves have now received over 1,000,000 visitors with the annual average number of visitors running at around 75,000.

The council has also taken ownership of a vast swath of Cuilcagh Mountain immediately south of the caves and has instigated an award-winning conservation scheme on the large area of blanket bog here. But again, it is not a sterile type of conservation: education groups of all ages are encouraged to visit and new walking routes have opened up the area to a new generation of visitors. Today, the Marble Arch Caves Global Geopark—a member of the European Geoparks Network—is the main tourism hub in this part of Ireland. It employs over 50 local people during the tourism season (April–September) with a staff of 14 retained throughout the year.

The indirect benefit of the geopark is also large, with new accommodation providers opening for business and new restaurants opening in the nearby villages of Blacklion and Belcoo. Currently the benefits of the geopark are spreading and the geopark has expanded in area across much of west Fermanagh and across the Irish border into the neighboring county of Cavan.

Conclusion

The Global Geopark Network continues to expand as UNESCO brings the geopark concept to all parts of the world. Many new membership applications are pending and members from across the network are assisting these territories in their membership bids to ensure the overall high quality of services is maintained. The network is still young and the coming years will continue to be ones of great challenge.

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