Geotourism, Conservation and Society

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Abstract. Geotourism is a rapidly increasing industry. In the UK areas such as the Giant’s Causeway on the Antrim Coast, Northern Ireland and the Dorset Coast of Southern England are world famous and visited throughout the year. The intrinsic attraction of these areas is geology whether as part of the landscape or as a resource to more directly enjoy and use. Geotourism offers both opportunity and threat to Earth heritage conservation. There is an established and strong framework for Earth heritage conservation in the UK involving site selection, documentation and safeguard. Central to this process is the need to promote our Earth heritage and its conservation. Gaining awareness and understanding at all levels, from international or national government to local community, will ensure continued support and backing for Earth heritage conservation. Geotourism offers a means for achieving such wider appreciation. The message and the audience must be carefully considered. An holistic approach, one that places geology in a wider context is deemed essential. Geology not only as part of the wider landscape and environment but also as central to our culture and history. Such an approach widens the appreciation of the specialist researcher or geology student and increases the personal relevance to the non-specialist - the wider public. Initiatives such as the identification of ‘Natural Areas’ in England and the development of the Pan-European Biological and Landscape Diversity Strategy now start to address these very issues. It is essential, however, that geotourism is achieved in a framework of sustainable development. The needs of the environment, economy and society must be carefully balanced now and in the future. The impact of wider use through increased value must be carefully managed; the economic resource generated through geotourism should contribute to the maintenance and enhancement of the Earth heritage resource; and the needs of society, particularly the local community (not just the geotourist) should be met. The opportunities (and threats) that geotourism brings to Earth heritage conservation are discussed. In particular, the value of wider and integrated promotion is considered in establishing a societal culture that increasingly values our Earth heritage resource and the need to conserve it.


Key words: UK, geotourism, geoconservation

Introduction

Tourism is the fastest growing industry and economy. In the UK it contributes over 4% to the Gross Domestic Product providing work for over a million people. The growth in tourism is paralleled by a rise in ‘geotourism’ as interest in our Earth heritage, and more widely the environment, expands.

Geotourism has a clear impact on the Earth heritage resource, an impact which is both positive and negative for conservation (Larwood & Prosser, in press). This paper addresses the question of how this impact can be managed and, in particular, what benefits can be brought to Earth heritage conservation.

Earth heritage conservation in the UK - its status

Earth heritage conservation in the UK is rooted in the 1949 National Parks and Access to the Countryside Act and has evolved to the present through the 1981 Wildlife and Countryside Act. This provides the legislative framework in which to conserve Earth heritage sites as a network of Sites of Special Scientific Interest (SSSI).

Conservation in the UK has gone through a classic development cycle of site selection, site safeguard, site documentation and site promotion. The process of the Geological Conservation Review (GCR) has
selected a national suite of sites (Ellis et al., 1996). These GCR sites are safeguarded and afforded statutory protection as SSSIs. Each of these sites has been documented as part of a series of GCR subject volumes published by the Joint Nature Conservation Committee providing the scientific justification for their selection. Additionally, in England, Site Management Briefs (unpublished) have been written to provide a clear site record and guidance on management and enhancement.

Selection, safeguard and documentation provides a strong foundation but one that needs to be built on through promotion: interpretation, involvement and raised awareness. Earth heritage conservation will better succeed with support not only from government and developers, but also local communities and the wider public. Promotion through ‘geotourism’ is potentially capable of securing the long term support and understanding that is essential for the future of Earth heritage conservation.

Conservation and geotourism - linking the two

The primary justification for Earth heritage conservation is ‘the need to maintain our Earth heritage for both present and future generations to experience, learn from and enjoy’. This justification is mirrored by geotourism which in simple terms is ‘travelling in order to experience, learn from and enjoy our Earth heritage’. Geotourism is therefore, in part, a consequence of successful Earth heritage conservation as this ensures the presence of a resource to ‘experience, learn from and enjoy’.

The audience for Earth heritage conservation and geotourism is also similar ranging from the specialist through to the wider public. It is with geotourism that the greatest opportunity exists to reach the wider audience; the special interest tourist motivated by enjoyment of the environment and even the wider public impressed by the scale and beauty of the landscape.

Some examples from the UK

Increasingly, the way Earth heritage is promoted in the UK recognises the wider appeal the subject has including science and education and linking with cultural, historical and aesthetic values.

1. A classic example is the Giant’s Causeway on the Antrim Coast of Northern Ireland. The columnar jointed basalts of this lava plateau are famous the world over as a landscape feature of high aesthetic value and as a geological feature of both high scientific and educational interest. The former brings the most visitors making the Giant’s Causeway the primary tourist destination of Northern Ireland. Today this value is recognised locally, nationally and internationally and the locality is currently the only geological World Heritage Site.

2. In the English West Midlands, around the town of Dudley, is the heart of the ‘Black Country’, so called because it was here that saw the birth and growth of the 19th century industrial revolution. The geological resource was central to this with local Silurian limestones, Carboniferous Coal Measures and transported iron ore providing the raw materials for the developing industry. Today it is this historical and cultural heritage that is celebrated, promoted and valued by the local community and by the many visitors to the area. This area is also internationally famous for its geology being the subject of the 19th century studies of Roderick Murchison and containing some of the richest Wenlock fossil localities in the world. This rich Earth heritage is now protected by a network of sites including a National Nature Reserve (the Wren’s Nest), Sites of Special Scientific Interest, Local Nature Reserves and Sites of Importance for Nature Conservation. It is, however, also the historical and cultural value placed on this resource that ensures the long term support for its conservation through both local government and local community.

3. The Dorset Coast in Southern England provides a classic example of an area that is internationally famous for its palaeontology and stratigraphy and visited by thousands of tourists seeking dramatic coastal scenery and the chance to experience our fossil heritage. The Dorset Coast is valued from the specialist to the wider public. This, however, can create significant pressures on this resource. This has lead to the recent Jurassic Coast Project which will promote interest in the Dorset Coast but also address its long term management. Geotourism and the use of the Earth heritage resource must be ‘sustainably’ managed to ensure the long term value and integrity of this coastline.

4. A further example of geotourism is that of the small Shropshire town of Ludlow close to the Welsh/English border. Here a small roadside locality provides an internationally recognised section of the Silurian Ludlow Bone Bed. This locality is visited by researchers from the world over; a classic example of specialist geotourism. Collecting in the 1970s significantly depleted this resource. It has only been through careful subsequent management and raised local awareness that the Bone Bed is still present and still the destination of many geologists.

These examples show the mutual benefit between successful geotourism and Earth heritage conservation. It is also clear, especially from the last two examples, that as geotourism grows so does the pressure placed on the resource. It is therefore essential that Earth heritage conservation and geotourism act in partnership to ensure this mutual success.
Making geotourism work for Earth heritage conservation: The holistic approach

In recent years, Earth heritage conservation in the UK and particularly England, has widened to a framework placing it in a context of landscape, habitat type and traditional land use. The joint English Nature/Countryside Commission (English Nature, 1996) initiative to characterise the landscape into a series of Natural Areas/Character Areas makes a significant move from a purely site based approach to one in which our Earth heritage is considered as part of a wider landscape (Duff, 1994; Prosser, 1995).

On a Europe-wide scale this holistic approach has become embodied within the Pan-European Biological and Landscape Diversity Strategy (1995) (implemented by the Council of Europe in conjunction with the UN Environment Programme). A key element of this strategy is the development of an integrated vision of landscapes as part of a unique mosaic of cultural, natural and geological features.

This holistic approach is one that should equally be applied to geotourism. Rather than being considered in isolation Earth heritage should be viewed as part of the landscape and environment and as part of our historical and cultural development. It is through such an approach that the message promoted to tourists will automatically include aspects of Earth heritage. Tourists, whether they are aware or not, will in some way all be geotourists.

Sustainability

An important aspect of the tourism debate is the need to adopt a sustainable approach which balances the needs of the environment, the economy and society (UK Strategy for Sustainable Development, 1994). Sustainable development is essential to ensuring the long term viability of the Earth heritage resource. This is demonstrated on the Dorset Coast where, unless the use of the resource is managed sustainably, in the long term the Earth heritage resource may become depleted and the scientific interest threatened. A balance must be struck that doesn’t deplete the resource, cheat the visitor or exploit the local population.

It is only through sustainability that geotourism can continue to successfully contribute to Earth heritage conservation and avoid threatening the resource. Earth heritage conservation and geotourism should be for now and future generations and it is these ideals which are embodied within the concept of sustainability.

Conclusions

Geotourism and Earth heritage conservation have a clear mutual benefit. Geotourism can bring support for Earth heritage conservation and conservation can ensure a resource for the geotourist. Importantly, geotourism offers a means of promoting our Earth heritage, gaining support and understanding for the need for its conservation. Promotion is essential for successful conservation and is central to the conservation selection, safeguard and documentation cycle.

Experience within UK Earth heritage conservation has shown that an holistic approach places Earth heritage conservation in a wider context within environmental conservation and expands its relevance to a wider audience. This is an approach that geotourism should adopt, providing a cultural and historical link and a connection with the aesthetics of landscape and the environment.

It is, however, essential that a long term view is taken. Geotourism must be achieved within a sustainable development framework in which the needs of the environment are met alongside those of the local community and the geotourist.

Finally, there is significant economic potential in geotourism, as evidenced by the overall growth of the tourism industry. Given the desire to sustain geotourism a strong case should be made to contribute an element of this wealth to the conservation of the Earth heritage resource.

References


Department of the Environment. 1994. Sustainable development - the UK strategy, HMSO.


PLATE I
Fig. 1. The Giant's Causeway, County Antrim, Northern Ireland
Fig. 2. Trench cross-section of the Silurian limestones of the Wren's Nest national Reserve in the heart of the West Midland town of Dudley

PLATE II
Fig. 1. The Dorset Jurassic coastline at Charmouth
Fig. 2. The Malvern International Conference visits Ludford Corner in Ludlow Shropshire. The Ludlow Bone Bed is the notch at the base of the visible section