



Geodiversity planning and management

Welcome to the 3rd Earth heritage: World heritage Newsletter. This issues looks at the use of geological and geomorphological information in planning and site management. The topics covered range from the sustainable management of palaeontological sites in relation to fossil-collecting pressures, to the recognition of the role of geology in cultural landscapes. These topics demonstrate the importance of raising awareness of geological values, the links between geodiversity and biodiversity, and those between geodiversity and cultural heritage.

Chris Sharples, a consultant geoscientist from Tasmania discusses the way that geoconservation and geodiversity have been included in management options in Tasmania. Over the last 10 years in particular, the profile of geoconservation has been raised considerably in Tasmania, and numerous planning and management procedures have had geoconservation incorporated into them.

Lars Erikstad, of the Norwegian Institute of Nature Research tells a similar story for Norway, where there has been a long tradition of geological nature conservation, dating back to 1911 with the first Norwegian Nature Conservation Act which included the protected of areas with mineralogical and palaeontological interests. In recent years, the protection of biodiversity has often been considered to be at the forefront of nature conservation measures. However, a recent draft act in Norway has suggested that legislation also needs to take into account the dynamics of natural systems, and therefore landscapes and geological features are also being protected.

Planning issues in the city of Durham are addressed by Tracey Ingle, Head of Cultural Services at Durham City Council. Durham City was inscribed as a World Heritage site in 1986 for its cultural values. The whole creation of the city, however, is dependant on its underlying geology, and an understanding of this underlying geology is therefore recognised as being equally important in making planning and management decisions for the city.

Finally, the report by Richard Edmonds from Dorset County Council and his co-authors, considers how to sustainably manage fossil-collecting pressures at palaeontological sites. Comments and opinions on the report and its views are being encouraged and sought, and a questionnaire has been generated to record these, from which a discussion paper will be developed. Please read the report, complete and submit the questionnaire and let us know your views, and encourage those with an interest in palaeontological site management to do the same.

Emma Durham
United Kingdom Joint Nature Conservation Committee



Contents

Welcome	1
Durham City: the case for cultural landscape	2
Use of geological/geomorphological information in landscape planning	2
Tasmanian approaches to integrating geoconservation into the planning process	3
Sustainable site-based management of collecting pressures on palaeontological sites	3
News, events and contacts	4



Durham City: the Case for Cultural Landscape

*Tracey Ingle (Head of Cultural Services,
Durham City Council)
E-mail: Ingle@durhamcity.gov.uk*

Durham City is centred on an incised meander of the River Wear. The first evidence for occupation was archaeological finds in the locality suggesting Mesolithic and Neolithic occupation (10000 to 2300 BC). There is also evidence for Iron Age, Roman and Anglo Saxon occupation. Following the conquest in 1066 the best place to build a strong and tangible power base was in the established town of Durham with its obvious benefits as a place that could be easily fortified and protected. Durham became home to the ruling Prince Bishops until the nineteenth century and the cultural heart of the region. Recognition of the outstanding universal value of these Norman monuments was given in 1986 when the Durham Castle and Cathedral World Heritage Site was inscribed by UNESCO.

The formation of this outstanding human architectural intervention on top of a small hill in the plains of the middle reaches of the River Wear came from the geological formations that allowed a number of peninsula outcrops, each settled at different times. Geology also provided the rich underlying coal measures, and the Durham Coalfields further shaped the history and built form of the district and region.

Durham has a unique and authentic historic environment, and there has been planning intervention over the last 30 years to ensure that the City retains this. The process of managing change to allow a modern city to grow and develop in the shadow of the World Heritage Site is a challenging one. To achieve the appropriate balance all decisions on change start from an understanding of the context of the land. This in practice means that the topography, driven by geology, lies at the root of most planning decisions in the heart of the City.

World Heritage sites have been divided into Natural and Cultural. In Durham's case the move towards an understanding of the importance of a mixed site within a cultural landscape is essential to make the correct decisions today. To ensure the citizens of the future can enjoy a city that is unique and authentic and tells its story from the tip of the tower to the deepest coal shaft requires an understanding of the value of natural landform overlain with human intervention.

To view the full report go to <http://www.geoconservation.com/EHWH/conference/presentations/ingle.htm>

Use of geological/geomorphological information in landscape planning

*Lars Erikstad (Norwegian Institute for Nature Research),
E-mail: Lars.Erikstad@nina.no*

Geological and geomorphological information have long been recognized as important in certain fields of land use planning, especially linked to nature conservation. But the Earth sciences also have a major role to play in the wider field of nature management and planning. Norway has a long tradition of geological nature conservation. The first Norwegian Nature Conservation Act in 1911 specified mineralogical and palaeontological interests, among others, as a legal basis for establishing natural protected areas.

New nature conservation acts were passed in 1954 and 1970. The act of 1970 is still in force and enables the establishment of various types of protected areas, including national parks, protected landscape areas, nature reserves and natural monuments. Geology is accepted as a justification for protection in this act, but is not specified as it was in the act of 1911. A committee with the task to review the legislation relating to biodiversity, have, however, proposed new legislation in Norway. The committee has considered it particularly important to develop legislation that takes into account the dynamics of natural systems and the need to use a variety of instruments to achieve Norway's objective of stopping biological diversity loss. Biological diversity is therefore of key importance, but the draft act has a much wider scope, since it is also designed to protect other natural assets, especially landscapes and geological features.

The general understanding of natural values and our natural (and to some extent geological) heritage has improved in recent years. Together with better legislation in the general land use planning system this has made it possible to consider geological conservation within normal planning procedures.

Within the framework of sustainability it is clear that geoconservation and geological nature management deserve a more prominent place than they have today. One important element required to achieve this is to provide relevant vital information at all levels in nature management and planning, and through this raise awareness of its values and the links between biodiversity and geodiversity as well as between geodiversity and cultural heritage. The importance of the Earth sciences for landscapes and landscape identity is a powerful resource.

To view the full report go to <http://www.geoconservation.com/EHWH/conference/presentations/erikstad.htm>

