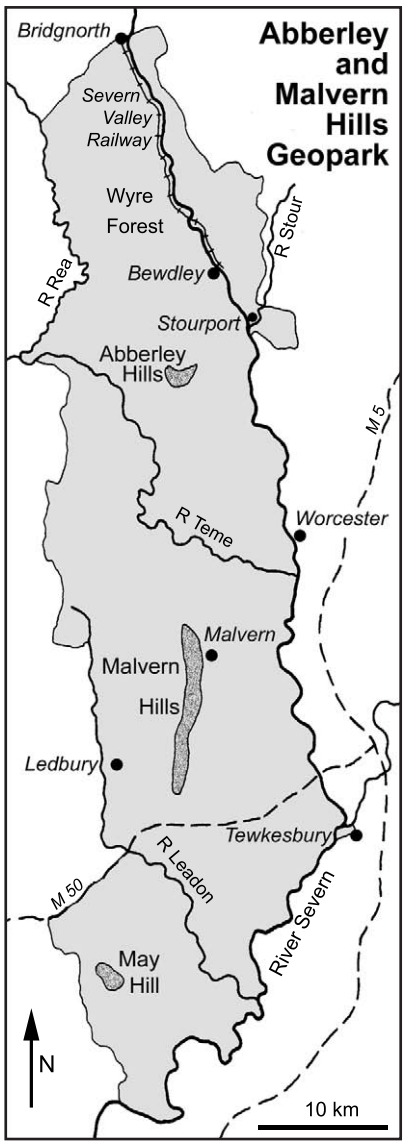
REPORT

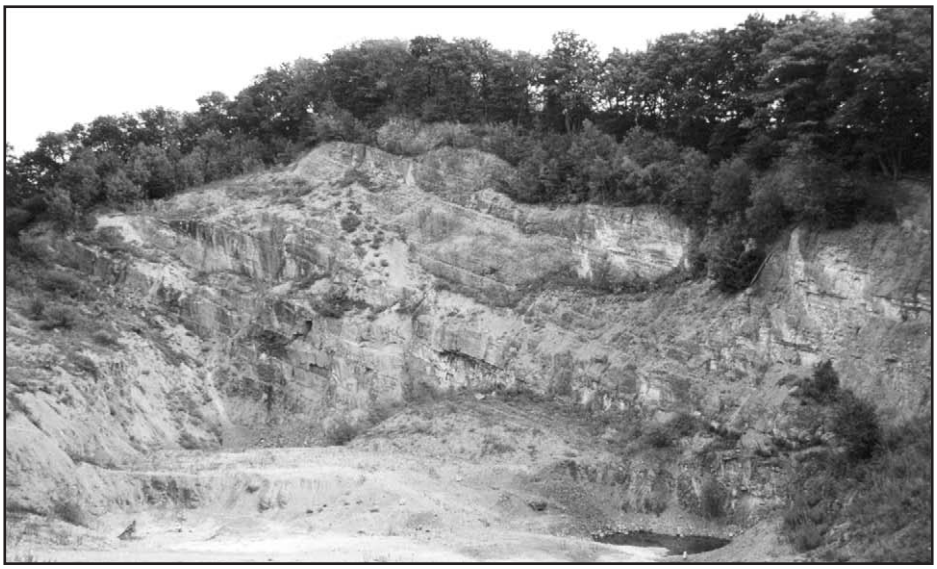
Abberley & Malvern Hills Geopark

A new feature of Midlands geology is the Abberley and Malvern Hills Geopark, which now covers an area of 1250 km^2 within the counties of Herefordshire, Gloucestershire, Shropshire and Worcestershire. In October 2003, it became the 17th member of the European Geopark Network. The international importance of the Earth heritage of the area has therefore been highlighted by its designation as a Global Geopark. UNESCO created the Global Geoparks Network in February 2004, and the European geoparks then merged with eight already established in China. The partnership that founded the Abberley and Malvern site, and now takes the project forward, consists of the Abberley Hills Preservation Society, English Nature, the Forestry Commission, Gloucestershire Geoconservation Trust, Herefordshire and Worcestershire Earth Heritage Trust, Scenesetters and University College Worcester.

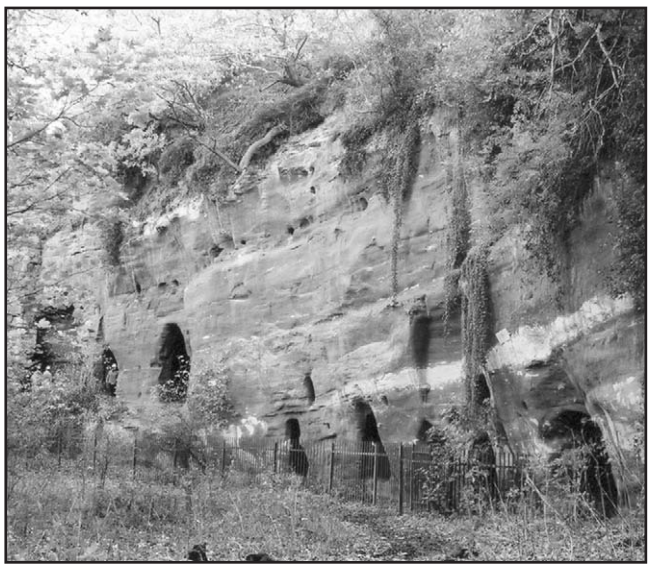
The Abberley and Malvern Hills Geopark represents one of the classical areas of British geology, where the geological and geomorphological significance of the area has formed the basis for research and mapping from the works of Roderick Murchison through to the present day. The two lines of hills form the backbone of the Geopark to illustrate over 500 million years of Earth history. Stratigraphy from Precambrian to Jurassic, and also the Quaternary, is represented, including almost complete successions from the Silurian and Triassic periods. A fine range of igneous, metamorphic and sedimentary rocks is exists, with some nationally important exposures. The geological map quickly illustrates the strong structural influence on the area. The underlying Precambrian basement with its associated faulting and folding has a major north-south influence on the geology of the Geopark. Its impact can be seen from the southern margins of the Silurian May Hill pericline inlier, through the surface expression of the Precambrian of the Malvern Hills, to the nearby Silurian hills of Ledbury and Suckley and onto the



The Malvern Hills, formed of Precambrian basement rocks, in the view north from British Camp on Herefordshire Beacon.



Whitman's Hill Quarry, near May Hill, exposing limestones and shales that represent a complete succession through the Silurian Wenlock and Ludlow Series.



Redstone Rock, at Arley Kings, west of Stourport, with its old hermitages in the Triassic Wildmoor Sandstone.

Abberley Hills themselves. The associated major faulting then continues in to the Carboniferous rocks of the Wyre Forest. This geological backbone is flanked by a full Triassic succession to the east and by a significant part of the Lower Devonian to the west. Furthermore the glacial and fluvial history of the Quaternary is written in the deposits and terraces of the Rivers Severn, Teme, Rea and Leadon.

In the nine months since Geopark designation, the Abberley and Malvern Hills Partnership has been working closely with the active and well established Earth heritage groups that are located within the site, to create an environmentally sensitive programme of geological investigation and conservation. This is complemented by a programme of public and educational awareness that is aimed towards fostering a greater appreciation and understanding of Earth heritage and also making the links between geology and the natural landscape. The programmes include rock and fossil roadshows, public lectures, guided walks and self guided trails. There is an established series of geology, landscape and building stones trails within the geopark; trail guides and interpretation panels not only provide information about Earth heritage but also focus on the associated archaeological, ecological, cultural and industrial heritage of the Geopark. Locations with public access are used, and the trails and sites can be used by schoolchildren as part of their work in the national curriculum. They have also been used in undergraduate degree courses at University College Worcester. A notable success has been the use of an existing guide by the Severn Valley Railway Education Department. This vintage steam railway company now produces a programme for schools using the guide, which explains the geology and landscape along the route. The geology is explained as the train travels along and also at various stations in the Wyre Forest coalfield and along the entrenched valley of the River Severn.

Geoparks in Europe

Copper Coast, Ireland - coastal scenery
Marble Arch Caves / Cuilcagh Mountain, N Ireland - karst
North Pennines, England - moorland scenery
Abberley and Malvern Hills, England - stratigraphy
Cabo de Gata, Spain - mines and Neogene volcanics
Maestrazgo, Spain - stratigraphy and structures
Rouchechouar, France - Jurassic astrobleme
Haute Provence, France - stratigraphy and fossils
Vulkaneifel, Germany - volcanic cones and craters
Nordlicher / Teutoberger, Germany - dinosaur trails
Bergstrasse / Odenwald, Germany - sandstone and granite
Kamptal, Austria - stratigraphy and fossils
Eisenwurzen, Austria - alpine terrains
Madonie, Sicily, Italy - limestone caves
Roccade Cerere, Sicily, Italy - old mines
Lesvos Petrified Forest, Greece - Neogene fossil trees
Psiloritis, Crete, Greece - structural geology and karst

Geoparks in China

Shilin,Yunnan - stone forest karst
Huangshan, Anhui - granite mountains
Lushan, Jiangxi - Quaternary stratigraphy
Yuntaishan, Henan - mountain scenery
Shongshan, Henan - Precambrian stratigraphy
Danxia, Guangdong - sandstone mountains
Zhangjiajie, Hunan - Quartzite pinnacles
Wudalianchi, Heilongjiang - basalt volcanics

Designated Geoparks, with their main geological interests.

To celebrate the importance of geology and geodiversity throughout Europe, the Geopark Network co-ordinated a series of events within each member's territory. This proved to be a great opportunity to raise awareness of the importance of geology on both national and international levels. A series of well-attended events celebrating the geological heritage of the area ran through May and June, 2004, with an inaugural lecture by Professor Aubrey Manning, president of the Geopark.

What is on the horizon for the Abberley and Malvern Hills Geopark? The geopark is participating with eleven other European Geoparks in a public awareness and education initiative, and there are proposals to twin with one of the Chinese Geoparks. The management team also have plans for an earthquake observatory, for a regular 'geological activity' bulletin and for a holiday geology and geotourism programme within the Abberley Hills. It is also a prime task to foster good working relationships with parish councils and community groups, landowners, local authorities, museums, universities, schools, and country parks. All this is aimed to bring geology to as many people as possible and to protect it for future generations to see.

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