

THE GEOLOGICAL ENVIRONMENT



Our region's geology spans 80 million years. Some 300 million years ago sands and gravels were deposited in coastal deltas by huge river systems, seen today as gritstones around Rochdale and Oldham. Land plants colonised delta-top swamps, the remains of which were buried and compressed to form coal. These coal measures, successions of sandstones, mudstones and coal, stretch across the north of the area from Bury to Wigan and are evidence of fluctuating sea levels at that time. Britain then moved across the equator and arid, desert conditions prevailed. Evidence of desert dunes can be seen today in the red sandstones to the south of the area from Stockport to Salford.

The rocks were then sculpted by recent ice ages into the diverse landscapes found today around Greater Manchester. To the east, the high ground of the Pennines forms a peaty plateau with rocky edges and deep valleys. The coal measures and desert sandstones extend from the Pennine edge west and south to give a varied topography of extensive river valleys and plains with lower lying moorlands, all much influenced by later glacial deposits and recent erosion. This wide geodiversity also sustains a rich biodiversity.

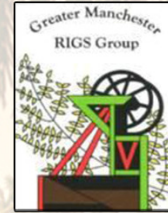
Agriculture, especially sheep farming, created a domestic scale textile industry which, aided by exploitation of the regional mineral wealth, grew into the industrial revolution. Local building stone, clay for brick making, coal and plenty of soft water helped establish the textile mills and other manufacturing industries.



Manchester Geological Association
Founded 1925

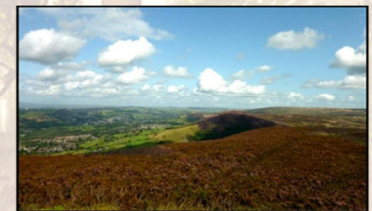


THE GREATER MANCHESTER REGIONALLY IMPORTANT GEOLOGICAL AND GEOMORPHOLOGICAL SITES GROUP



The GMRIGS Group was set up in 2004 to continue the work started in the 1970s by Manchester Museum as part of a national museums initiative to record sites of local geological importance. This legacy of over 700 records is now being used to evaluate sites against the criteria devised by GeoConservation UK.

Any site assessed to be a good example of local geodiversity is submitted to the local authority for approval and then added to their planning database for consideration in future planning decisions.

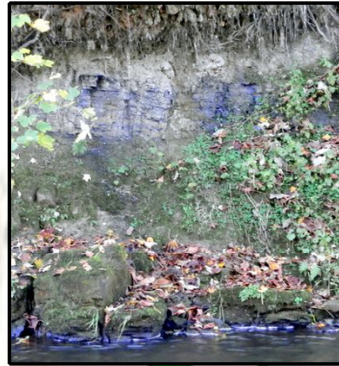


The GMRIGS Group of volunteers hopes that recording and protecting areas of local geological importance will raise public awareness of the special geological heritage of the Greater Manchester area which, together with biodiversity, creates open spaces for leisure and are an educational resource.

Geology of Greater Manchester with some of the Approved RIGS



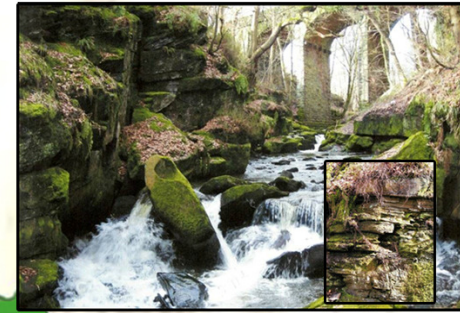
Haigh Hall, Wigan



Tonge Fold, Bolton



Gorses Quarry, Bury
Rochdale



Healey Dell, Rochdale



Glodwick Brickpit, Oldham



Clifton Country Park, Salford



Park Bridge, Tameside

	Triassic
	Permian
	Carboniferous, Coal Measures
	Carboniferous, Millstone Grit



University, Manchester



Rochdale Canal, Manchester



Poise Brook, Stockport



Arden Bridge, Tameside

