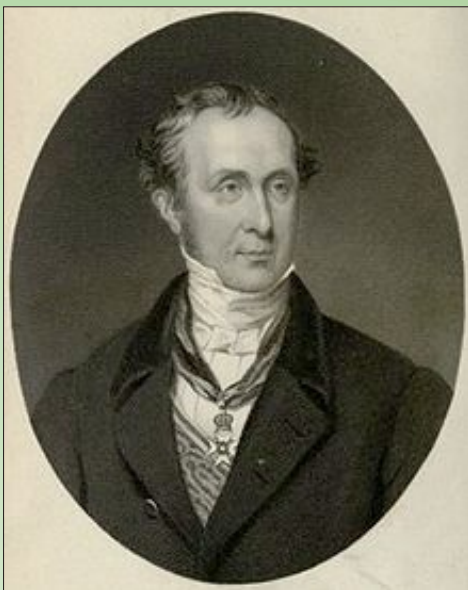


Sir Roderick Impey Murchison (1792–1871)



Murchison was born in Scotland. A successful military man he was encouraged into geology by his wife and the work that he did contributed immensely to the science of geology as we know it today. In 1839, following a field trip to the area, Murchison wrote about Martley Rock in his famous paper 'The Silurian System'. This was the first time that information about the site appeared in print.

Murchison was among the first British geologists to appreciate the value of fossils in the research of rock strata. He devoted much time in the early 1830s to mapping the geology of Wales and the Welsh Borderland. In 1835 he named the series of fossil-bearing rocks that he had studied the 'Silurian', after a Welsh tribe, the Silures.

Murchison received awards from just about every scientific society in Europe, and at least 15 geographic features on Earth are named after him. These include Mount Murchison in New Zealand; Murchison Falls in Uganda; the Murchison River in Australia; and a 58km wide lunar crater, the Murchison Crater.

Teme Valley Geological Society

The Society was formed in 2010 and comprises a group of keen, amateur, local geology enthusiasts with a scattering of unstuffy professionals. All are really excited about exploring and promoting Martley and the Teme Valley.

The society is based in Martley, Worcestershire, in the valley of the River Teme. It holds regular talks and field trips covering both the local area and further afield.

Details contact the secretary:

Phone: 01886 888318

Email: info@geo-village.eu

The Martley Rock Project

The project received European LEADER funding from 2011 to 2012. The project aims were:

- To audit and document the geological sites in Martley Parish
- To develop Martley Rock as a visitor attraction
- To produce educational materials for schools
- To provide geology courses for adult learners
- To develop sustainability through a geo-tourism initiative for Martley



Supported by the LEADER Programme. LEADER forms part of the Rural Development Programme for England (RDPE), funded by the EU and the UK Government.

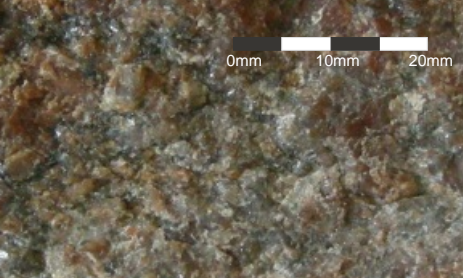
Martley Rock

... a site of extraordinary geology



The geology at Martley Rock is exceptionally varied, puzzling and of great scientific interest. Spanning over 700 million years (MY) it includes some of the oldest rocks in England. Walking from the entrance to the far side of the site you pass through five geological time periods. Amazing, in such a short distance!

Continents colliding, magma chambers far underground, warm shallow seas, steamy tropical forests and swampy lagoons ages old, rivers in harsh desert landscapes: clear evidence for all of these environments is to be found here! This pamphlet, the interpretation boards and web links (QR codes) will help explain.



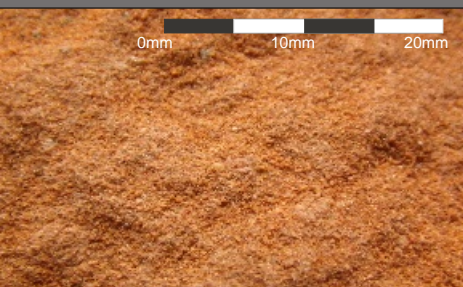
Precambrian aged Malverns Complex



Martley Quartzite



Carboniferous aged fine grained sandstones and mudstones



Triassic aged sandstone

Martley is a parish of great geological diversity with seven designated Local Geological Sites and a total of around 35-40 features of geological interest, but of them all it is Martley Rock that tells the most compelling story. Rocks and sediments representing six geological periods can be found within the small site of less than 3000 square metres.

When we start to interpret the different rocks seen here and how they relate to each other, then there is an incredible story to be told about them and the events that shaped Martley's landscape.

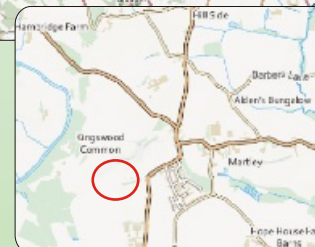
The main feature at the site is an exposure of the most northerly outcrop of the Precambrian aged Malverns Complex (around 700 MY old), some 15 kilometres north of the main Malvern Hills ridgeline.

The ancient Precambrian Malverns Complex and the Martley Quartzite (around 530 to 488 MY old) at the site are surrounded by progressively younger rocks. Silurian mudstones (around 416 MY old), Carboniferous mudstones, siltstones and sandstones (around 308 MY old) and Triassic sandstones (around 230 MY old) are all present. Quaternary aged sands, deposited sometime over the last million years, are also visible.

The Malverns Complex consists of igneous and metamorphic rocks. Igneous rocks form deep underground when molten rock (magma) cools and solidifies, forming crystals as it does so, the slower the cooling the larger the crystals. Metamorphic rocks form when igneous or sedimentary rocks are subjected to immense heat and/or pressure. The effect of this stress is to change their appearance and structure. The dominant igneous rock in Martley is a dark, green-speckled, coarse-grained diorite. Also present is a granite-like, coarse-grained rock with components of quartz and feldspar giving it a pink colour. Both of these formed deep underground from magma. During their long lifetime they have been subjected to numerous phases of earth movements and unimaginable levels of heat and pressure. This resulted in them being moulded, fractured and altered to varying degrees i.e. metamorphosed.

Martley Rock and the 1995 Rugby World Cup

This small quarry pit was opened to extract hard Malverns Complex and Martley Quartzite for use as local roadstone. Reference to the site in a geological paper first appeared in 1839. Over the subsequent 125 years, numerous site visits and field notes were taken by visiting geologists. These field notes show that further extraction and periodic infilling of the pit took place during this time. By the late 1980s the quarry had been completely filled in and was planted with Christmas trees (still growing), by a young South African rugby player, Ruben Kruger, over here with Worcester. In 1995, Ruben was a key member of the South African rugby team that won the world cup and he was named South African Player of the Year. The Springboks were later portrayed in the 2009 film 'Invictus', (Ruben played by Grant Roberts). Ruben scored a try against France in the semi-final match and had a definite try disallowed in the final against the Kiwis (New Zealand). Unfortunately Ruben died in 2010 after a long struggle with a brain tumour.



Planning a visit?

Please note that the site is on private land (Cob House Fisheries) and as such kindly respect the need to stay within the site boundary as shown at the entrance. Also note that the driveway is a private road leading to a residence so be aware at all times of vehicle movements.

View from Martley Rock facing north-east



Visiting school parties book via Cob House Fisheries
01886 888517, sales@cobhouse.org