

# 3 PUBS CHALLENGE: Introduction to the Local Geology and the Walk

Teme Valley Geological Society [www.geo-village.eu](http://www.geo-village.eu)

The walk follows the black dots on the map and parallels an important break in the earth's crust—the **EAST MALVERN FAULT** (EMF). This fault separates the relatively flat Severn flood plain (+-220Ma) from the much older (+-430Ma) hills to the West and with its counterpart to the East, formed a major rift valley where the land has dropped by up to 3000m then filled with debris from mountains in what is now Northern France. Much of the route follows the Worcestershire Way (WW), a national route marked with a black pear; our signs will also be placed along the route. Colours on the map linked to similarly coloured explanatory panels explain the rock type for each part of the route. The British Geological Survey uses these standard colours to designate different formations.

Martley is, geologically speaking, an exceptional area because of the numerous rock formations that are to be found and the span of time represented—around 670 million years (Ma). Note that the oldest part of the parish was formed kilometres underground whilst somewhere north of the South Pole! Since then owing to the process known now as plate tectonics, our land has moved through desert, tropical and temperate zones, each leaving its stamp on the earth on which you tread. Oceans have opened and closed, continents have grown and split apart, great mountains have been built and eroded, faults and volcanic action and of course ice have all acted to mix up and shape the landscape seen today. There are information boards towards the beginning of the trail to explain some of this.

Whilst on the way take time to note the different colours of the soils—mainly red, as evidence of its formation in dry desert regions. The field of Martley Rock is an exception of course with its amazing variety of formations from up to 6 geological periods, somehow mixed by earthly processes to end up lying close to one another! Also take time to note the materials used in older local dwellings—at first brick, fired from the red Triassic sands and clays; nearer the hills and especially on Ankerdine, stone from quarries now well concealed by vegetation and erosion though traces remain. As you descend from the top of Ankerdine towards the Talbot there are quarries to your left—'boys' and 'girls' where the children used to play and out of which e.g. Doddenham church was largely constructed.

## START: CROWN AT MARTLEY TO MARTLEY ROCK

1. Follow the path between Crown pub and the garage into the new housing estate, following the right of way and the signs made for the 3 Pubs Challenge.
2. Turn right after the last of the new houses, follow the path around the housing then through a small wood towards the quarry area known as **THE NUBBINS**.
3. Through the gate, turn left on the track for +-150m then bear right up to the rock faces and an interpretation board. ***Stay away from rock faces*** as stones do fall from them quite regularly.
4. Continue west where the rocks peter out, up right and back on yourself at a higher level.
5. Continuing straight, pass another quarry face on the left, to a track thence to a waymarked gate in the left hedge line.
6. Through the gate cross the field to a signed path T junction, turn left, rising to a subtle crest with wonderful views opening up on all sides:

- Horizon North-East, Clent Hills (Permian 299) and Lickey (Ordovician 488)
- Foreground, East, Worcestershire Plain an ancient rift valley filled with debris from eroded mountains (Triassic 210)
- South-East Bredon Hill and the Cotswolds (Jurassic 175)
- South, background, The Malverns (Precambrian 670), foreground The Berrow (Permian, 299)
- West, Teme Valley, Bromyard Plateau beyond (Devonian 410)
- North-West, Clee Hills (Carboniferous 310)
- North, Abberley Hills (Silurian 420)

7. At field end, right through the hedge line, past an old pear tree then left after the gate along a track to a lane.
8. Cross the lane on to the Worcestershire Way, hedge on left to a lane. Here, turn right along a private drive to **MARTLEY ROCK GEOLOGICAL SITE** to cross the EMF, stepping back 200 Ma! Explore the site using the information boards and please sign the book!

## MARTLEY ROCK TO ADMIRAL RODNEY

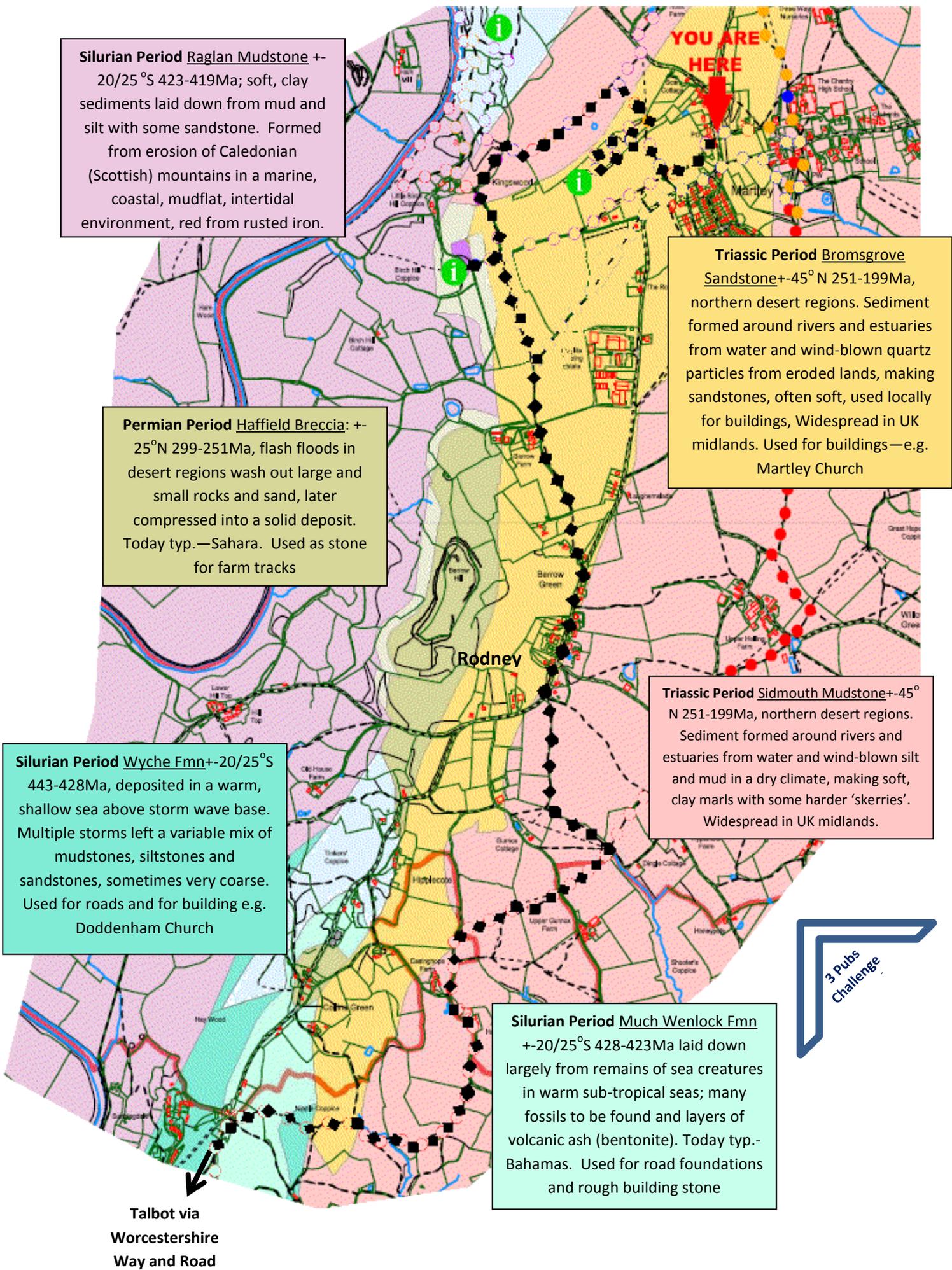
9. Return to WW post; turn right on the WW to the Admiral Rodney for stamp number 2 and maybe some refreshments. ***Take care on the road.***

## ADMIRAL RODNEY TO TALBOT

10. From the Rodney, continue on the road, pass the junction and turn left along the WW into the fields.
11. Keep to the WW through fields and lanes, over the EMF, climbing up to Ankerdine through Nipple Coppice then left along the ridge of Silurian hills—both sandstone and limestone—until it descends steeply to the B4197 and thence down to the Talbot. The steepness is evidence that the rocks, though laid down flat in oceans have been pushed up so that the layers are nearly vertical. Note how the River Teme breaks through the line of hills beyond the Talbot to reach the flood plain and its meeting with the River Severn.

There is more on the geology of the Teme Valley on our web site [www.geo-village.eu](http://www.geo-village.eu), and on walk pamphlets to be found on the site or at the dispenser opposite the Crown. Email [martleypfo@gmail.com](mailto:martleypfo@gmail.com). The walk is undertaken entirely at the risk of those taking part, TVGS accepts no liability whatsoever for any incidents however caused.

### 3 PUBS CHALLENGE—Crown at Martley via Admiral Rodney to the Talbot Knightwick



**Silurian Period Raglan Mudstone** +/- 20/25°S 423-419Ma; soft, clay sediments laid down from mud and silt with some sandstone. Formed from erosion of Caledonian (Scottish) mountains in a marine, coastal, mudflat, intertidal environment, red from rusted iron.

**Triassic Period Bromsgrove Sandstone** +/- 45° N 251-199Ma, northern desert regions. Sediment formed around rivers and estuaries from water and wind-blown quartz particles from eroded lands, making sandstones, often soft, used locally for buildings, Widespread in UK midlands. Used for buildings—e.g. Martley Church

**Permian Period Haffield Breccia:** +/- 25°N 299-251Ma, flash floods in desert regions wash out large and small rocks and sand, later compressed into a solid deposit. Today typ.—Sahara. Used as stone for farm tracks

**Triassic Period Sidmouth Mudstone** +/- 45° N 251-199Ma, northern desert regions. Sediment formed around rivers and estuaries from water and wind-blown silt and mud in a dry climate, making soft, clay marls with some harder 'skerries'. Widespread in UK midlands.

**Silurian Period Wyche Fmn** +/- 20/25°S 443-428Ma, deposited in a warm, shallow sea above storm wave base. Multiple storms left a variable mix of mudstones, siltstones and sandstones, sometimes very coarse. Used for roads and for building e.g. Doddenham Church

**Silurian Period Much Wenlock Fmn** +/- 20/25°S 428-423Ma laid down largely from remains of sea creatures in warm sub-tropical seas; many fossils to be found and layers of volcanic ash (bentonite). Today typ.-Bahamas. Used for road foundations and rough building stone



Talbot via  
Worcestershire  
Way and Road

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Challenge**  
0774 977 4432 June 21st

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