THE WOOLHOPE NATURALISTS' FIELD CLUB

(ARCHAEOLOGY RESEARCH SERIES)

RESEARCHING THE LEOMINSTER CANAL

Paper 8 : HEREFORD'S COAL

(Early coal supplies . . . and a colliery walk)

Recalling the Survey of 1789

by

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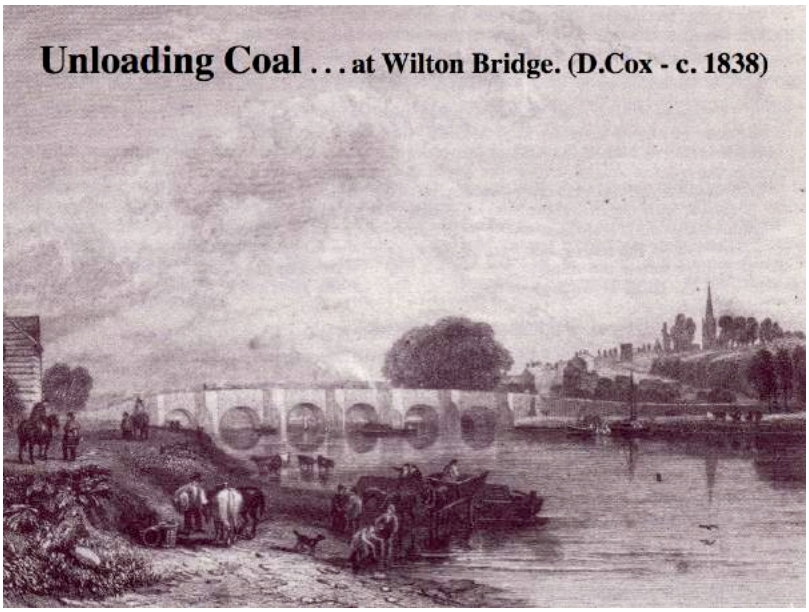
- HEREFORDSHIRE *. . . the former coal supplies* -

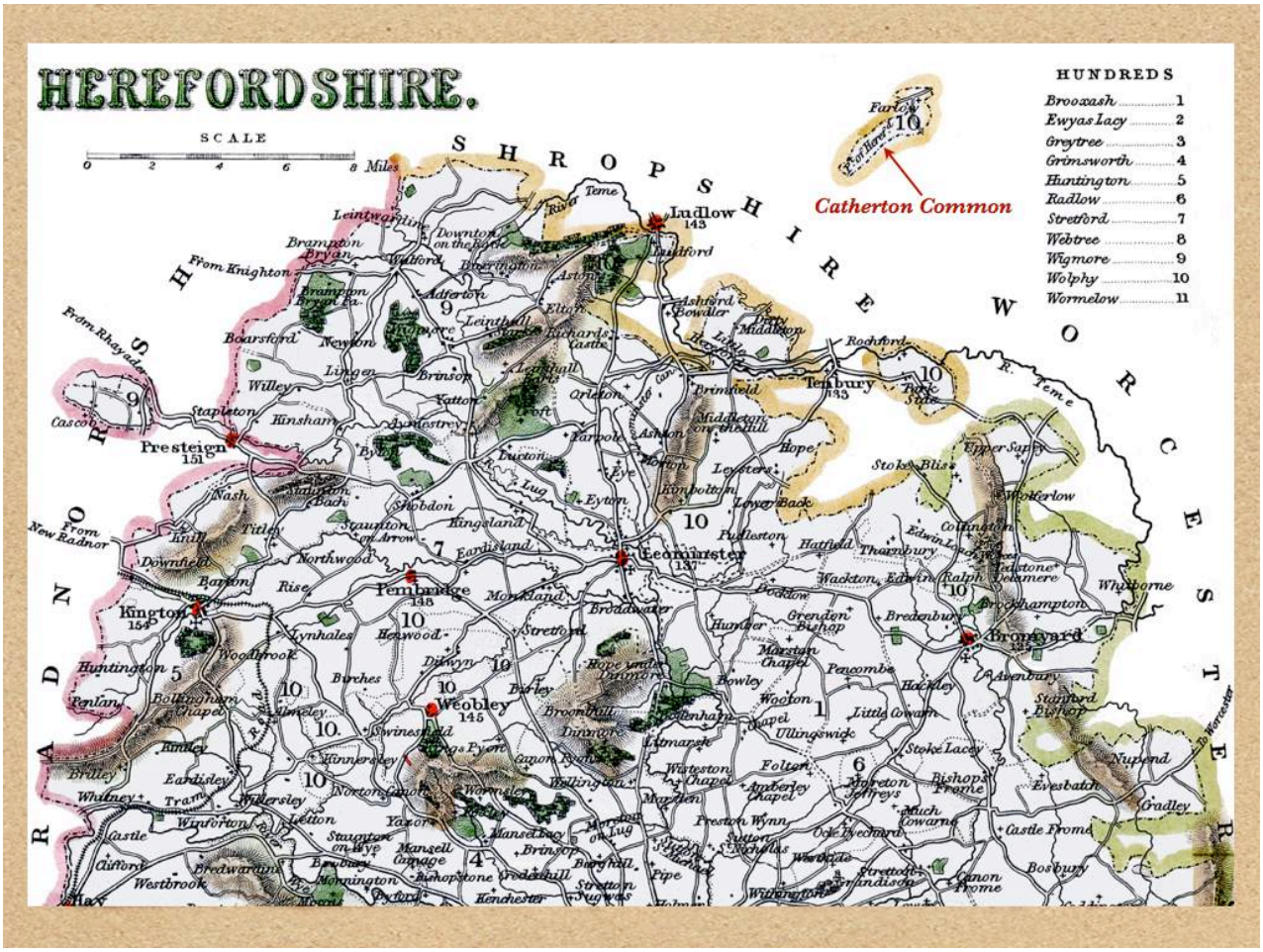
In bygone times Hereford mostly imported its coal from the Forest of Dean via the ancient and partially improved Wye Navigation, which had evolved by parliamentary enactments - and also included the canalised Lugg between Mordiford and Leominster. Unfortunately neither river was wholly reliable due to the vagaries of flood and drought but on the other hand the Clee Hill coal, whilst nearer, was relatively expensive due to its haphazard procurement, the high cost of manual portage from the scattered bell-pit workings, and then horse-cartage to the markets in Leominster and district.



Given their proximity to the Forest of Dean coalfield, the Ross district, and the lower Wye Valley in general, had always faired better by importing their coal supplies via the Wye Navigation; but otherwise, much of the county remained rather starved of cheap coal, and especially so in the Leominster and Kington districts.

THE COALFIELDS

Early coal-mining was usually undertaken where coal seams actually outcropped, and/or where it was found to be sufficiently near the surface for extraction by simple adits or by shallow 'coal-pits'. Such was the early Mamble mining, but because of high sulphur content, much of the coal was rather unsuited to industrial usage – particularly iron smelting – whereas its pungent aroma was considered very conducive to hop-drying!



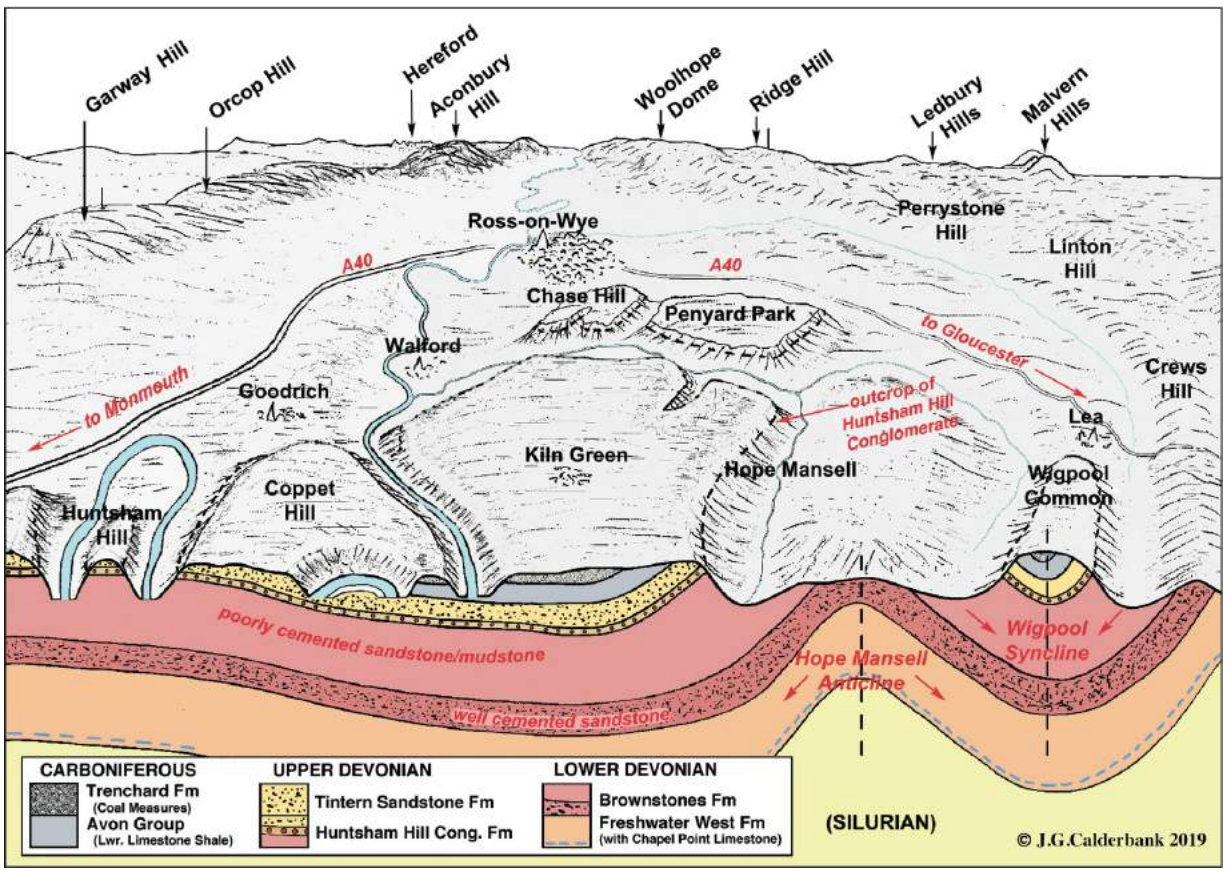
- Part of Archer's Map (1842)

Coal mines at Catherton Common, Shropshire
Cambridge University Collection, CIJ 74: February 1974

Historically, the Catherton Common bell-pits in the chapelry of Farlow were once within a detached part of Herefordshire, situated on Titterstone Hill in South Shropshire.

Following the nineteenth century boundary changes, Herefordshire had retained almost no coal resources of its own except for a tiny outcrop at Howle Hill near Bishops Wood (but now exhausted from open-cast quarrying). This coal once supplemented the main Forest of Dean supplies to Ross - albeit on a very minor scale.

Much of the county is rather remote from the other coalfields which occur at Clee Hill, and also the West Worcestershire Coalfield as far south as Great Witley, beyond which point there's a considerable gap before the West Gloucestershire outcrop near Newent and the vastly more significant Forest of Dean reserves. Apart from the ancient Wye Navigation, there was little prospect of importing distant coal on any worthwhile (commercial) scale. The use of horse-and-cart to Ludlow, Leominster and N. Herefordshire and to the Ross area are well known, but this was not really viable for industrial purposes, whereas 'coal canals' were intended to rectify this shortcoming and found to be highly effective in the collieries.



THE WEST WORCESTERSHIRE COALFIELD

Although most of the coal mining occurred between Bayton and Abberley, several outcrops extended further south, with some isolated workings recorded even beyond Woodbury Hill and Martley

THE TRAMROADS

At first glance tramways may seem superior to waterways in the popular mind, so likely viewed as mere replacements; however that's not only simplistic, but also misconceived, since it's only partially correct. As regards the practicality of carrying coal, minerals and other heavy goods (but always given a level playing field) then water transport is undoubtedly the more efficient method of bulk transport and certainly the cheapest, even today. In simple terms of what load a single horse can pull by boat – as compared to a wheeled vehicle – then it's "no contest" although, thanks to commercial constraints and human impatience, such a level playing field was rarely ever encountered.

Major disparity arose only when time entered the equation: this would be time saved by a straighter (and thereby shorter) railroad route, as compared to a meandering canal, especially an early contour canal of the Brindley and Dadford era. Time was also a major consideration when gradients impinged on the level playing field, this by virtue of the tram's ability to surmount gradients without time-consuming locks. Nevertheless, whenever distant haulage relied upon horses, then the speed differential for bulk transport by land or water was not unduly significant. It was the advent of locomotive haulage that would greatly alter this balance: thereafter, the relative speed differential would become increasingly important for both passenger and bulk traffic alike. What's more, the potential for even greater improvements lay firmly with rail.

There's another important consideration. Because of the simpler engineering involved, the tramways were appreciably cheaper to construct, to maintain, and then operate - as compared to their canal counterparts. This message is repeated in various engineering reports, and would be further endorsed were we to examine the two (conflicting) recommendations made over a period of years by John Hodgkinson to the Proprietors of the Leominster Canal Navigation. Although we don't know the history of Mamble's tramway system, the inaugural Leominster Canal Act of 1791 contained certain clauses pertaining to both coal and 'railroads' – as they were then called. This is because earlier experience elsewhere had taught Parliamentary agents the need to make provision for future legal issues and any unforeseen technological problems that might otherwise lie in wait for the canal company.

It was thought that coal seams could very likely be encountered when tunneling the Teme/Severn watershed (*so a potential proprietary issue!)* and it seemed certain that transport would be needed to feed the coal from any such workings to the canal terminal and also to serve any other convenient loading and/or trans-shipment points along the route as, for example, Dumbleton, Stockton and Pensax.

Unfortunately for its Proprietors, the Leominster Canal wasn't destined to reach such places because it never operated beyond Southnett Wharf. Suffice it to mention that it was John Hodgkinson of Abergavenny, a renowned canal and plateway engineer, who recommended completion by tramroad to Stourport when first consulted in 1803. He later changed his tune (1812) and came up with an alternative scheme to connect the Mamble and Pensax district collieries to the Severn by extending the Leominster Canal through Langridge, Martley and Wichenford to Worcester. This was in anticipation of accessing the Worcester & Birmingham Canal, then under construction, which would obviously have provided a much easier route to Birmingham than the Staffordshire & Worcestershire, with its connection via the Dudley tunnel. An easier river passage to Bristol and also to London via the Stroudwater and Thames & Severn canals was also mooted by the Worcester proponents.

Around this same time (1812-13) there were several other 'railroad' schemes put forward, including a branch line from Burford to the Clee Hill coalfield and also a cross-country short cut from the canal near Orleton to Kingsland – intended to rejoin and continue the original line via Shobdon to Kington. Yet another tramway was proposed, this time from the Mamble - Pensax - Abberley coal mining district and aiming to connect with the *Staffordshire & Worcestershire Canal* at Stourport. A survey for this project was ordered by the Leominster Canal Company but, despite protracted meetings with the Staffs. & Worcs. proprietors, nothing had materialised by the time of the 1826 Leominster Act. Ironically, in May 1820 it was completion of Hodgkinson's plateway route from Brecon via Hay-on-Wye to Kington that boded ill for the Leominster company; it had already put an end to any further Kington expansion plans – and, eventually, the Shropshire and Herefordshire Railway Company would be the final nail in the Leominster Canal coffin.

Despite the lack of records, we can be reasonably certain that the Southnett to Mamble tramway was never in direct ownership of the actual Leominster Canal Company Proprietors. Instead, it seems likely to have replaced a temporary horse-and-cart 'stone road' used by the Blounts, who – by commercial imperative! – were known from newspaper reports to be exporting their coal from as early as 1794 when their first cargo reached the Teme valley. It's probable that the Blounts missed out on the early 'edge-rail' period because, rather than edge-rails, it's suspected that the link was achieved by plateway and so it probably dates from plateway inception around the turn of the century.

Whereas Israel Cohen achieved huge expertise regarding the Leominster Canal, which he meticulously researched before sharing his findings with Charles Hadfield, it seems that parliamentary enactments, together with the archival and journalistic (i.e. largely documentary) evidence concerning the actual canal history was his main concern. Despite his inclusion of a detailed map (probably based upon Bryant's Map) the engineer made scant mention of most physical remains, although he was undoubtedly aware of such features and had probably visited many if not all of them, including the Mamble coalfield, which was most likely reached by the customary Cohen bicycle ride!

Nevertheless, we suspect that the coalfield was not of prime interest because Cohen simply dismisses the Mamble workings as 'open cast' whereas they bear little resemblance to most such mining, which always required massive mechanisation and normally left extensive scarring unless the landscape was restored. It is known, however, that in pre-industrial times many of the locals dug the coals either at outcrop or in shallow bell-pits, albeit nothing like the scale of nearby Catherton Common, depicted on Archer's Map (above).

THE COLLIERY WALK *. . . we suggest OS 'Explorer' 203 for this Circular Walk*

When visiting the main group of coalfield sites around Mamble village, the most convenient car-parking is the wooded lay-by 'Picnic Site' (SO 686 713) - relict of A456 road straightening - where a field gate gives easy access to spoil heaps marking an adjacent shaft site. This shady parking is normally used for the following circular walk that, in part, follows a section of the main colliery tramroad along the Marl Brook valley.

Having viewed this first shaft site, we continue down the field to the edge of a wood, alongside which ran the main colliery tramroad. Make for the trees marking some much smaller heaps of spoil. Not only is this next spoil much less, but the upcast is a different colour *(since it lacks coal fragments)*. This is because the spoil derives not from mining, but from tunnelling a drain. Early mining around Mamble, as also with neighbouring coal-mining districts, relied at the time on gravity flow along drainage tunnels which, so far as possible, followed the stratigraphical bed-rock dip. Before steam pumping, these tunnels were required in order to keep the workings free from flooding and they were known in the Coalbrookdale, Wyre Forest and West Worcs. mining districts as 'footrids'

Continuing down the tramroad, a style soon gives access to woodland where the ground is noticeably soggier and is generally disturbed by several water-filled craters amongst the trees; these are taken to be the flooded excavations where clay was extracted, and it seems very likely that this clay was used for large-scale brick making. Throughout this wooded stretch there's also a sheet of water to the left of the path - but this is something of a curiosity because it doesn't seem to have been mapped, either in the past or on the modern OS sheet. Nevertheless, OS Explorer sheet 203 (the most recent mapping) does indicate that this water forms part of the Marl Brook watercourse, and so it must presumably have been flooded at some time past; furthermore, this map, like earlier editions, also indicates that the Marl Brook here was previously culverted under an unsurfaced track leading down from Newhouse Farm, with effect that the farm track now acts as a dam, impounded the stream. Wether this be intentional or accidental isn't obvious, although collapsed culverting seems distinctly probable here, as most certainly occurred shortly beyond the blockage.

Upon emerging from the woodland we cross the farm track to another style giving access to tree-studded pasture where, within only a short distance, both tramroad and MarlBrook are re-encountered; although for safety reasons, the deeply entrenched brook has here been fenced off in only recent times. This is because part of the watercourse had formerly been dumped with loose coal-ming spoil, albeit with such instability that much of the 'made-up-ground' has now started to collapse and is washing away down stream. Since remains of coal workings scatter this whole pasture, it would seem that much of the spoil was originally dumped here in order to backfill a section of brook after having first brick arched over the stream bed. So probably the collapse has revealed a covered section of the Marl Brook that was likely also part of the main colliery (underground) drainage system?

Within only a short distance the open watercourse is again swallowed by more brick arching that extends for the next 245 metres, within which distance the culvert has passed under an unsurfaced track serving a hamlet – somewhat aptly named 'Footrid'! – where one of the cottages bears a cast iron plate stating "Completed 30 Dec. 1812", although we don't know what was completed – cottage or plateway, or perhaps something entirely different ? Just beyond the hamlet of Footrid, the Marl Brook is joined on the right by a tiny tributary, along which valley there once ran a branch tramroad serving a few coal working on the far side of the A456. Along this same stretch of brook, but this time on the left bank, there next occurs an effusion of reddish-brown coloured water that stains the stream for some little distance until sufficiently diluted. This staining is ochre, a common pollutant in coal mining districts, but more of this anon (Paper 9).

Continuing down the public footpath, our way is eventually barred by a road bridge, where steps lead up to a roadside stile; however, surmounting this requires great caution because the busy A456 is immediately adjacent - and it has no footpath! Instead, we turn left and take a short *(but potentially hazardous!)* walk along the A456 roadside verge. Whereas the tramroad passed under the road and continued alongside the stream to the Wharf House, sadly, there is no public access - so hence the road walking. When sufficiently clear of speeding traffic, the A456 may, with great caution, be crossed to a wider verge that this not only safer, but also permits a short detour in order to visit the Wharf House and possibly even go beyond to view the former lock sites, with keeper's cottage, then maybe also the crumbling Rea Aqueduct? In former times this could be crossed and the canal route followed to Newnham Bridge, but crossing is now strictly forbidden; instead, it would be necessary to retrace one's steps to the lane serving Marlbrook Farm and then either continue back the way you came, or preferably turn right for the A456, and thereupon turn left. Circumspection is again required when crossing the road before another short roadside walk, this time in the Mamble direction *(much wider verges!) will* soon reach more road-widening at Broombank lay-by (SO 871 270) where a gated private drive with public footpath, shortly followed by gated orchard, gives access to an upland field-system with splendid views in most directions. (If skipping the Wharf House and/or canal diversion, then we would reach this same section simply by continuing up the A456 verge from the Wharf House drive entrance to the same Broombank lay-by)

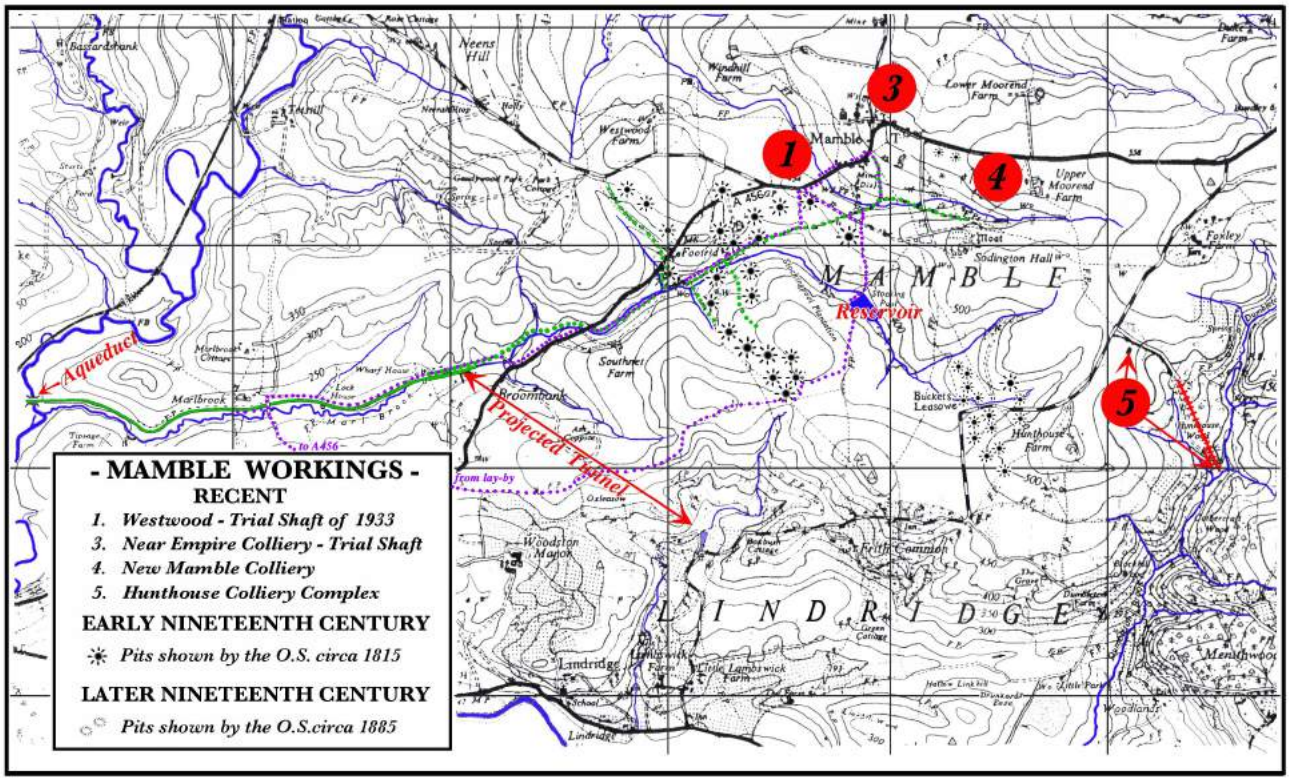
We are now traversing a section of the Teme/Rea watershed summit ridge. Viewed NW from here, the Titterstone Clee and the High Vinnalls / Bringewood uplands each dominate the landscape, whereas a more immediate reciprocal view overlooks the impressively deep Teme valley. Incidentally, along this stretch of footpath there are just a few places where the valley-side contouring - on either side of the river - reveals a preglacial past to the Teme drainage pattern. Hereabout, a few minor Teme tributary streams (or dry valleys likewise) are seen to be still headed in what now appears the 'wrong' direction! As previously noted in Paper 2, similar phenomena are repeated, but much more obviously, of course, with some tributaries in of the Teme valley between Newnham and Woofferton, and most notable of these is the Kyre Brook.

Although we set out over coal measures, the above map indicates we've been off the Coal Measures ever since the Marl Brook road-dip, and likewise, shows approximately where the coal field is regained – shortly beyond the line of the incomplete Southnett tunnel. At this point, time permitting, it's only a short (but steep)

detour using the intended horse over-path to peer down on the the Southnett tunnel portal - but first seek permission from 'The Hatch' if wishing to enter the (gated) paddock from the lane.

Having rejoined the ridge footpath, the signage directs us past a hilltop copse with horse pond and then down towards the edge of Stockingpool Plantation where, along the edge of the wood, there are still some faint traces of mining spoil. By following this fence line to a field gate at the corner of the wood, a fresh vista unfolds (SO 588 703). From this gateway we're looking down to the Stocking Pool canal reservoir on the Marl Brook headwaters, and beyond that, the valley side sweeps up to a wooded skyline ridge where there is situated an imposing Blount property - Sodington Hall - although its visibility depends very much upon the seasonal leaf-cover. If views are a high priority, and given favourable weather, then late March is possibly the optimal time of year for much of this walk. Our path skirts the edge of the woodland, down to the reservoir where the earthen dam is crossed and, again, glimpses of Sodington Hall are occasionally available, although a branching field path would allow closer inspection, together with a (lengthened) alternative return route via, in part, the tramroad again. In fact, once across the dam, there are shortly several short cuts available - whereas our more customary continuation up the side of the wood passes through several shaft sites and beyond

Reference to the 1901–25 Survey (OS 6") mapping and derived sheets shows that this Stocking Pool plantation has been extended, with effect that it now smothers much of the main concentration of Nineteenth century coal pits on the valley side. However, the woodland is reserved for shooting and should not be entered. It would seem these coal workings may not have been surveyed and recorded in recent times; nevertheless, some smatterings of spoil have escaped enclosure and a couple of larger, isolated mines are also prominent in the open pasture. At the end of the woodland a field gate offers the most direct short cut along what must have been a minor Sodington carriageway. This provides easy walking, although within yards of the gateway the carriageway is intercepted by the tramroad that we used at the start; here the righthand style offers the alternative route that we more usually take because there's yet more to be seen. This short stretch of tramroad passes one of the larger Mamble mine sites and is carried, in part, on a well defined low embankment as it heads for a tiny stream with culverted crossing, immediately over which, the tramroad forks. 'Sodington Junction' has here become the nickname because a right fork leads to the hall's main drive plus a few further coal mining sites scattered around the headwaters of the Shakenhurst Brook The left fork heads directly for Mamble village and the A456, followed by a couple of hundred yards roadside footpath to our lay-by starting point.



Please Note:

1) Although this excerpt is not intended for navigation, it outlines the walking route (dotted purple)

2) OS 'EXPLORER' 203 is recommended for the walk.

3) Paper 9 details the Mamble and Hunthouse mining history.