Churnet Valley Geotrail Section 1

From the historic Froghall wharf (1) follow the Froghall 'Green Walk' towards Foxt. The path follows the outcrop of Froghall Ironstone. Look out for several old mineshafts and a stream which dissects red mine spoil (2). If the bridge is closed, return down the trail to a path on the left across a stream, taking the left fork after 100m to stops (3) and (4) and then rejoin the trail.

In Whieldon's Wood (3) the Woodhead Hill Sandstone is exposed in the stream. Upstream, look out for an ochre layer from the processing of ironstone for coloured dye. The trail passes an outfall (4) draining a mine in the overlying Crabtree Coal and then climbs out of the valley past more coal workings.



Continuing towards Foxt, a break in slope (5) marks the line of a fault, separating the Rough Rock sandstones of Namurian age from the younger Westphalian mudstones down in the valley. From this point onwards notice the use of different sandstones in buildings and walls.





From Foxt, follow the road downhill and take a footpath on the left to an exposure (6) of red/orange Chatsworth Grit. Beyond the stile, head down to Shirley Brook. A short detour left leads to a tramway bridge and an exposure of the Roaches Grit (7).



The trail climbs back up to the tramway cutting (9) in Chatsworth Grit. Look out for the bleaching of the sandstone next to minor faults. (An alternative route back to Froghall Wharf follows this tramway downhill.)

Return uphill and take the right fork (10). Cross Whiston Common and turn right, over the A52 and take Black Lane into Whiston village (11) (12). Try to locate buildings made of blocks of copper slag - waste from the Whiston smelter, now demolished. (From Whiston, an alternative route back to Froghall Wharf continues along the lane to the A52, before following a footpath along a former tramway back to the start of the trail.)





Features in this area

The Froghall Ironstone seam was mined around Froghall where spoil is still visible (2). The last use of iron was for the production of ochre pigment for paint and dyes at Froghall (48).

Copper

Iron

Copper wire manufacture and brass (copper & zinc) production replaced iron smelting. The Cheadle Brass & Copper Co was set up in 1734. Extensive mining of copper ore at Ecton in the Manifold Valley required building a new copper smelting works at



Whiston (1768) (11). Blocks of copper slag can be seen in local buildings and walls (11) (12). By 1828 most copper wire production was handled at the new mills at Oakamoor.

Limestone

In 1775 the Cauldon Low quarries were leased to Caldon Lime Co. A tramway from the quarries to the Caldon Canal (1) at Froghall Wharf was part of the Canal Act. Several tramway lines



were built - 1778 (7), 1785 (10), 1804 (11), 1847 (9).

In many places lime kilns can be seen - Froghall Wharf (1), Oakamoor and Consall. These were used to burn limestone to make lime for use in agriculture and construction. The limestone was, and continues to be, used as a flux in iron smelting and, with mudstone, in the manufacture of cement.

Coal

Coal had long been used as a fuel, though not in early smelters as only charcoal generated the necessary heat. Mine shafts can be seen north of Froghall (2, 5) and this trail follows several former tramways.







Churnet Valley Geotrail Section 1

Froghall Wharf - Foxt - Whiston



The trail mainly follows public footpaths and other marked trails. Visitors should note that some of these have steep sections and muddy, uneven terrain so the use of suitable footwar is advised. There are also some sections along minor roads where care should be taken of traffic.

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