

Great Archaeological Sites in Merthyr Tydfil



6. CYFARTHFA IRONWORKS



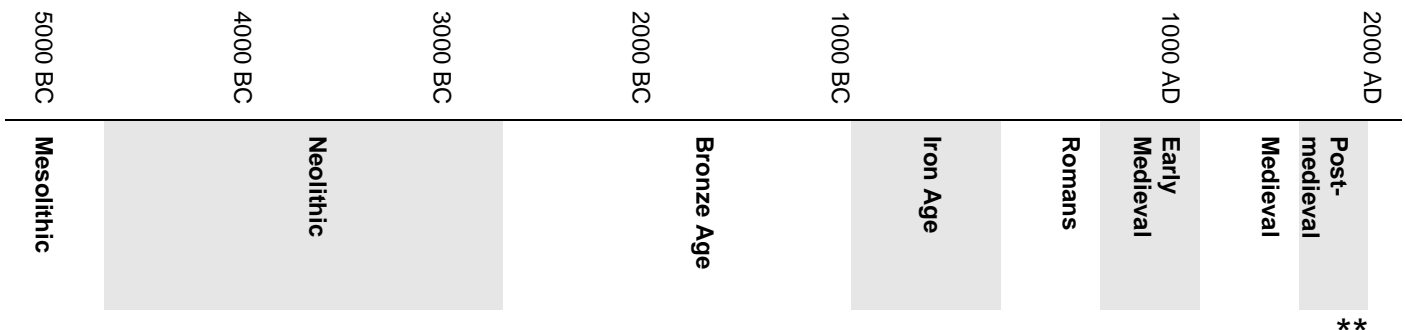
At the end of the 18th century and the beginning of the 19th century, Merthyr was a world leader in the production of iron, and the Cyfarthfa Ironworks were at the forefront. For most of its existence, it was owned and run by the Crawshay family who acquired it in 1783. In their heyday they were among the first ironmasters in Britain to experiment with the most recent inventions, adopting and refining new techniques such as the puddling process invented in 1784 by Henry Cort to turn cast iron into wrought iron. It was William Crawshay and his foundry manager George Watkin who turned Cort's process into a commercially viable operation, making Cyfarthfa a world leader in the production of wrought iron. By 1800, the original single blast furnace had expanded to four, and the power to run the blowing engine that provided the blast was produced by a giant waterwheel, known as Aeolus after the Greek god of the wind, designed by Watkin. He also designed the revolutionary cast iron Pont-y-cafnau that took a tramroad and the leats that brought the water over the River Taff. In 1807, Cyfarthfa was the largest ironworks in the world.

When Britain became gripped by railway mania in the 1830s, Cyfarthfa produced vast amounts of rails, which were also exported overseas as foreign countries also started to develop their rail networks. However, the second half of the 19th century saw the steady decline of the South Wales iron industry, and Cyfarthfa along with it, as its plant started to become outdated, local deposits of iron ore began to be worked out, and other parts of Britain were able to produce iron more cheaply. Cyfarthfa ironworks were however among the few to convert to steel-making in 1884. But ore now had to be brought from overseas and steelworks nearer the coast could out-compete Merthyr. The Cyfarthfa works closed in 1910, apart from a brief re-opening during the First World War.

The main structures to be seen now is the great bank of blast furnaces, six in all, that were constructed against the living rock. This enabled the charge – iron ore, coke and limestone – to be loaded into the tops of the furnace without the need to build massive charging ramps. The coke works that converted the local coal into fuel that would make good quality iron were placed at this upper level to avoid having to move it too far. The Trust excavated the coke works before B&Q was built, and much of their structure still lies buried beneath the store. The other structures alongside them are too ruinous to interpret easily, but Pont-y-cafnau still survives over the river.

The Taff Trail runs through Cyfarthfa Ironworks, nearest access from near the bottom of the A4102 Swansea Road (CF47 8PE). Maps: OS Landranger Series sheet 160, Explorer Series Outdoor Leisure sheet 12.

Timeline (the asterisks indicate the time-span)



You can learn more about this site, and other similar archaeological sites in Wales, by going to <https://www.archwilio.org.uk/arch/>. Please read and observe the Conditions of Use. Cyfarthfa Ironworks has the PRN (Primary Record Number) 01169m, the furnaces are 04960m and the remains of the engine house is 02372m. You can search for other similar sites here too. You can contact us via social media or through the methods given at the bottom of the page. You can find more about the South Wales iron industry via the industrial pages of our timeline <http://www.ggat.org.uk/timeline/timeline.html>.