Ironbridge Archaeology

Excavations at Wednesbury Forge

Welcome to Wednesbury Forge

There was a forge making iron at Wednesbury during the reign of Elizabeth I. The first written record goes back to 1597. At that time the forge was one of several water-powered sites along the River Tame.

During the eighteenth century the place became famous for the manufacture of guns and later pipes and tubes. In the nineteenth century the site was owned by Edward Elwell, who developed a worldwide reputation for the manufacture of spades, shovels and edge tools.

In the 1960s the forge was taken over by Spear and Jackson, who continued to make garden and edge tools here until 2005.

What are we doing?

Our excavations are taking place as part of the redevelopment of the site to provide new industrial units, a hotel and to upgrade the facilities of Wood Green School.

The excavations are being undertaken by Ironbridge Archaeology, the archaeology unit of the Ironbridge Gorge Museum Trust. The work is funded by Opus Land and Arlington Securities, and is being monitored by the Sandwell MBC Archaeologist.

Please feel free to ask any questions about the site. If you have any further queries then please email us at the address below, or write to us at the Ironbridge Gorge Museum.

archaeology@ironbridge.org.uk

Powering the forge

In the 17th century the River Tame was diverted into a large pond on the western side of the site, and a second pond was added to the north in the 18th century. Both ponds converged on the complex arrangement of sluice gates (*right*).

We have found the remains of wheel pits dating from the 18th and 19th centuries, with earlier structures underneath. After use, the water was fed back to the river through a series of giant culverts (*below*).

Working the iron

Transforming iron into tools involved many processes. The basic principles of ironworking remained unchanged right up to the final days of the forge in 2005.

Bars of wrought iron (later mild steel) were heated and then beaten into shape using a variety of different water-powered hammers and anvils. Grinding wheels were used to finish products and to sharpen edge tools. Steam power gradually took over in the 19th century.

We have found a large number of unfinished tools, such as these shovels (*right*). These were thrown away as faults developed whilst they were being made.

Grinding edge tools was dangerous work. If the dust didn't kill you, an exploding grindstone probably would.

The site was clearly divided into different areas. At the centre was the 'heavy' forge, with water wheels to the north and south. Further away were lighter operations such as grinding and finishing. Around the edge were warehouses and workers' accommodation.

Grindstones (far left) were re-used for many things, here they formed the foundations for a railway line.
Excavation of some of the wheel pits in progress (left).

The early history of the forge

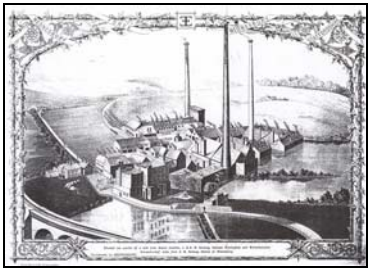
The forge was developed by William Whorwood in the 16th century, possibly on the site of a 13th century mill. The forge's first appearance in the history books came in 1597 as the result of a pitched battle between Whorwood's workmen and those of a rival forge owner, Thomas Parkes. Improvements were made to the water-power system in the first part of the 17th century, and in the 1650s the site was taken over by the famous Foley iron making partnership, who had furnaces and forges throughout the west midlands.

As well as industrial buildings and residues we have also found more delicate items, such as this Caughley porcelain teacup (above), which was made in Shropshire in about 1790. This would have taken pride of place in the Willetts' household. Brick workshop buildings of the mid-1700s being excavated (right).

Guns and Windmills

In 1704 the forge was taken over by John Willetts, who was followed by another four generations of the Willetts family. Originally their business was saw-making, but from the 1720s they were making guns for the Board of Ordnance. We have found a large number of gun-flints from this period (*left*).

The forge suffered from water shortages, and the Willetts added a second pool. John Willetts II even built a windmill, but this was not successful. This windmill was locally known as 'Willett's Folly', and parts of it may be incorporated into the later chimney we have found near the sluices. The Willetts family also expanded the grinding workshops and built a large house for themselves.



'Elwell's Forge' in the 19th century

Wednesbury residents still know the site as 'Elwell's'. Edward Elwell took over the forge in 1817 and quickly built a reputation for quality edge tools. Elwell further improved the water power system. The engraving of the 1870s (*left*) shows two pools as well as three large chimneys. In the 1890s the site had five breast-shot water-wheels and several steam engines.

Wednesbury Forge in the 19th and 20th centuries

Edward Elwell was succeeded by his grandson Alfred in 1869. As well as developing the forge business, the Elwell family also invested heavily in their workforce. The Elwells built St. Paul's church and converted old workshops to workers housing. They also developed sports facilities, including a football field and later a bowling green.

In 1904 the water wheels were replaced by water turbines, and we have found the evidence for these changes during our excavations. Much of the forge was remodelled, with the old grinding workshops demolished and operations transferred to new buildings to the east.

The archaeological excavations are continuing until August. We have found evidence for many of the earlier periods of the forge, such as the 17th century hammer bases (*above*).

We are not only looking below the ground for archaeology. We also made a photographic record of the forge in its final days, and are interviewing past and present employees about their working lives here.

What happens next?

The site will be redeveloped for new use. The archaeology that we have uncovered will be preserved in the form of the records, drawings and photos which we have made during our work.

All of our finds and records will be deposited with Wednesbury Museum. We will also produce a series of publications about our work here. An exhibition about the site is also planned for the future.

We very much hope that you have enjoyed your visit to the site. If you have any personal memories of the forge we would be very keen to hear from you. If you want to learn more about the history of iron making and the excitement of the industrial revolution, then please come and visit us at the **Ironbridge Gorge Museum**, just down the M54.

This leaflet was produced by Ironbridge Archaeology. Text and photographs by Paul Belford and Will Mitchell. Copies of this leaflet can be downloaded from the Ironbridge Archaeology website at **www.ironbridge.org.uk**..

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