Welcome to the site of

MAYFIELD FURNACE

As you enjoy the peace of the woods, imagine the noise, smell and heat of hundreds of people – and their oxen and horses – working here; cutting wood, shouting instructions, burning charcoal, and making iron and cannons. Horses and carts, or oxen and carts, then pulled the heavy guns on our muddy Sussex roads to the nearest river or seaport, to be shipped elsewhere in Britain, to Europe and to overseas colonies.

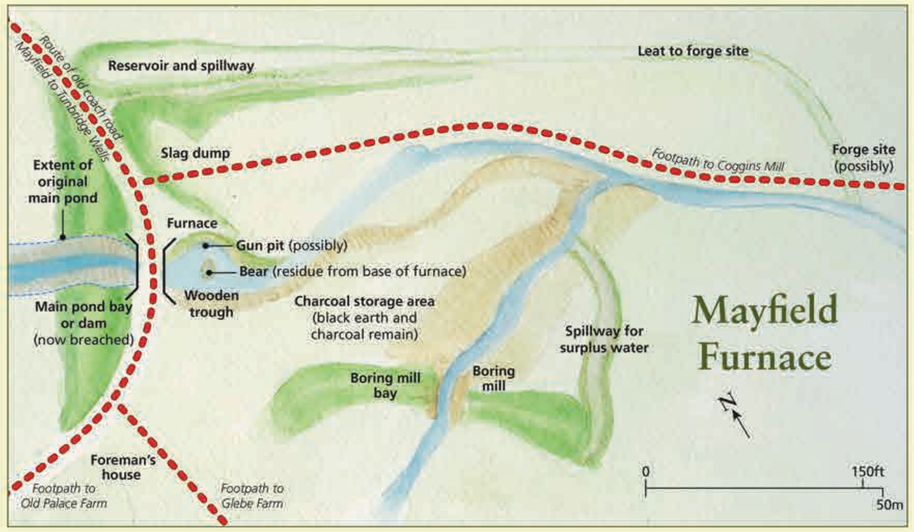
Sir Thomas Gresham, engraving by Francis Delaram early 17th century

In the late 1560s Thomas Gresham moved from Antwerp, where he had raised money and bought arms for Queen Elizabeth I. He moved to Mayfield and developed a gun foundry on this site. Gresham lived at Mayfield Palace, which is now St Leonards Girls School.

Other local foundries were also set up at the same time, to meet orders such as 100 culverins for the King of Denmark. Culverins were cast iron naval guns about 10 feet (3 metres) long, firing an 18 pound (8kg) shot over a mile.

Mayfield guns have been found in the West Indies, in Holland and in the mud of the Thames estuary.

By the 1590s, when Henry Neville had the royal monopoly for the export of cast iron guns, this site was perhaps the most important in the country. Production of cannons had stopped by 1610, but the manufacture of other iron goods continued here until the 18th century.



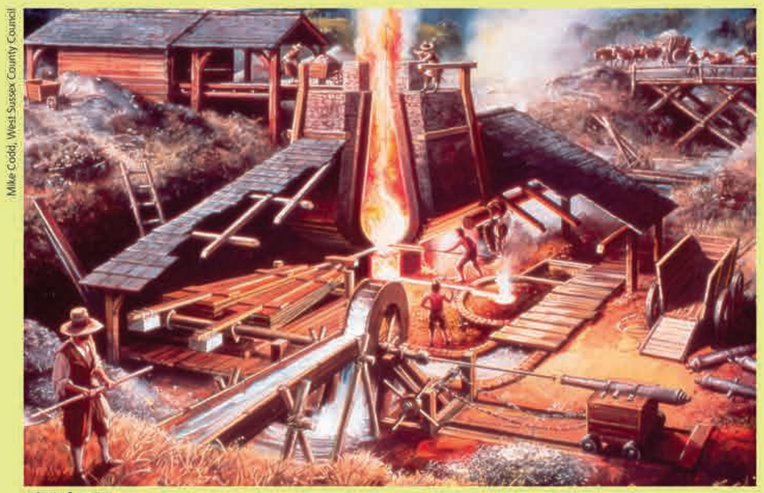
Section of a map showing the site in 1653

HTM Kirby, vicar of Mayfield, pictured in 1885. The Kirby family owned woods in this area in the 18th and 19th centuries.

By the 19th century the iron industry had moved to northern England, and the woods were owned by Thomas Kirby, the vicar at St Dunstan's Church in Mayfield. The Kirby family owned woods in this area for four generations. At the time coppiced timber was still used to make farm tools, household objects, carts and charcoal, and for fencing, hop poles, and building. The 1870 Ordnance Survey maps of this area have a Vicarage Wood to the east of here and a Kirby's Wood to the south.

The surrounding field names still witness the past; Great Forge Field, Little Forge Field, Old Palace Field and Furnace Wood.

Kirby's Wood disappears from maps. We believe it was felled close to the First World War. With the Woodland Trust, we are recreating a new native wood on the same site. It is a Jubilee Wood to celebrate The Queen's Diamond Jubilee. The new wood will occur by regeneration, as the surrounding woods naturally move into the field.



Blast furnace

Tudor iron-working

Locally-dug iron ore and charcoal from the surrounding woods were tipped down the furnace chimney. Water-powered bellows made molten iron which was poured into vertical moulds (for cannons) dug into the ground. Firebacks were made, as were pigs and sows – blocks of cast iron taken to a forge to be purified. The furnace would operate continuously for months, often until the water supply ran out. The bear (the residue from the base of the furnace) could then be removed. One ton of cast iron produced three tons of glassy black slag, which is to be found all over the site. The boring mill smoothed the inside of the gun barrels.

Gresham's guns were twelve times cheaper than their bronze equivalents, but they had a poor reputation for quality. It was said that they were "fitter to kill the user than the enemy."

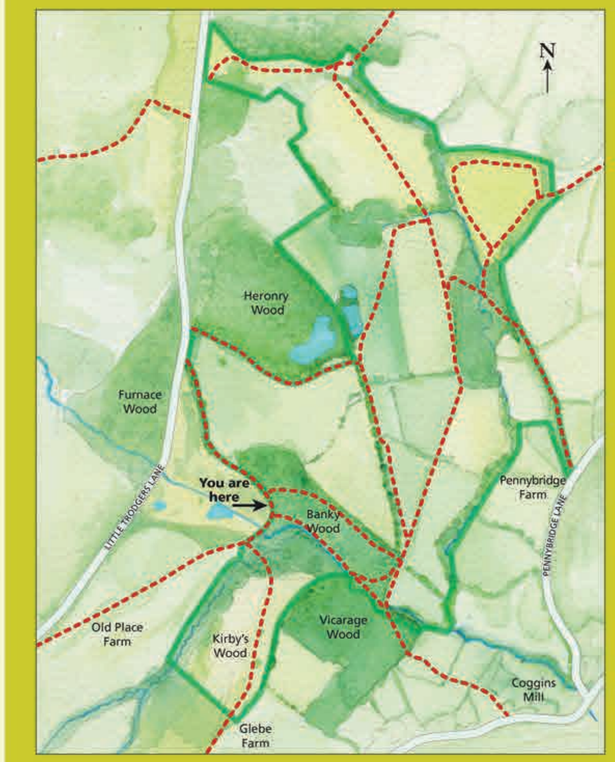
Gresham demi culverin

Managing our land

Wadhurst Park estate, the owner of these woods, manages them by coppicing with standards. This is a cycle of cutting and allowing the stumps to regrow. Most deciduous native trees – ash, hazel, oak, field maple and lime – will coppice. This allows light into the woodland floor, creating a habitat that is more diverse than mature woodland. Some trees are allowed to grow as they wish. In Banky Wood we are removing a conifer plantation from the ancient woodland. Trees and plants that were shaded out by the conifers, or are brought in by wind, birds and animals, will thus return.

We lightly graze the surrounding fields with sheep and cows to control scrub and grass height, creating habitats for wildflowers, insects, butterflies, birds and mammals.

Footpaths



Please enjoy our land and thank you for visiting. We are grateful to you for following the example of our other guests: leaving no litter, keeping to the paths, and protecting ground-nesting birds, small fauna and sheep from dogs.

Thank you to Tim Cornish, the High Weald Joint Advisory Committee, the Wealden Iron Research Group and the Royal Armouries Portsmouth, for helping us make this sign. For further information visit:

www.mayfieldfiveashes.org.uk
www.wealdeniron.org.uk
www.highweald.org
www.royalarmouries.org

HIGH WEALD AREA of OUTSTANDING NATURAL BEAUTY