

## Lead Smelting in Baslow

Baslow is a village in the Peak District of Derbyshire, This pamphlet describes the story of lead smelting in the parish. Lead has been mined in the area since Roman Times. Baslow itself has never had lead mines but has long been associated with lead smelting

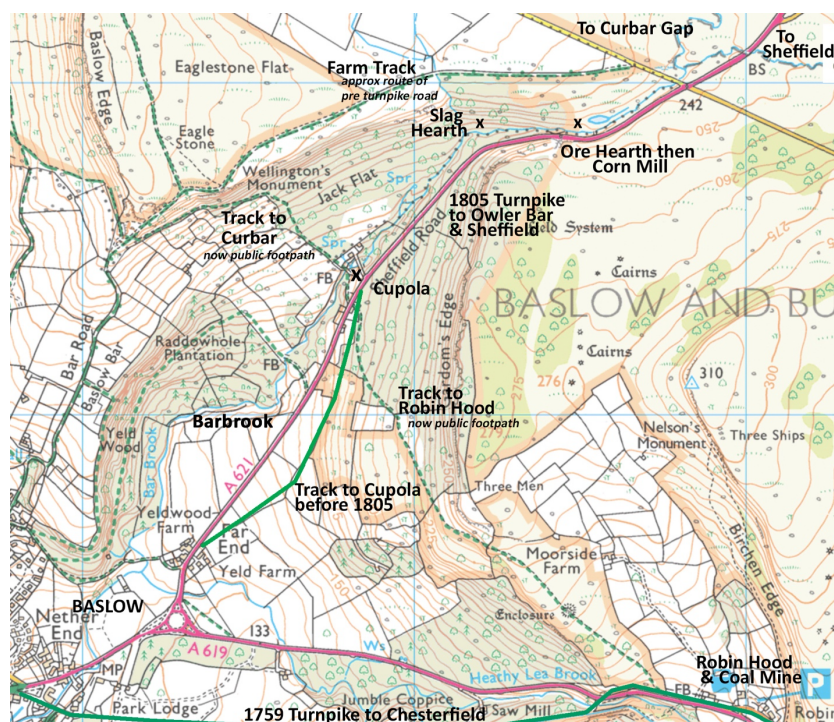
### a. Brief history of lead smelting

For centuries lead was smelted on open hearths called boles – little more than an open bonfire. These needed a good wind to fan the flames so most were situated on hills, especially on the crests of hills. Traces today are difficult to identify – usually darkened earth and a few pieces of slag, though place names can be helpful.

In the late 1500s the Ore Hearth arrived. These were much more efficient, and spread rapidly through all the lead mining areas. There were enclosed buildings needing water power to produce the blast of air necessary to smelt the lead, though a few early units were “foot blasts” powered by man. They also needed fuel - wood or charcoal. Over the centuries the White Peak had become depleted of woodland, so smelting moved to the Derwent valley and the moors to the east where wood and water were more abundant. The ore hearths were not very efficient. A later development was the slag hearth which operated at a higher temperature and extracted more lead from the original slag.

By the mid 1700s, there was a new Cupola furnace, more efficient more expensive and needing coal rather than wood based fuels. They gradually replaced the ore hearths, but still needed a slag hearth for the final processing.

By 1800 the industry was in decline, with few mines and smelters surviving into the 1900s.



## **b. Lead Smelting in Baslow**

### **Early Sites**

There must have been a number of small boles in the parish up to 1600 or so, especially on the Edges and moors to the east where some sites have been identified. Old maps show a Bole Hill on the ridge at the far end of Bubnell Lane. Nearby in Bramley Dale there is a field called Bellandy Dale. Lead fumes are poisonous to animals and humans causing a condition caused Belland. Both sites suggest pre 1600 lead boles.

Better known sites just outside the parish are located on Eastmoor at Hare Edge SK302727 and at Dennis Knoll SK295746

## **c. Ore Hearths**

### **Humberly SK 288716**

This ore hearth was situated at the junction of the Umberly Brook, Wadshelf Brook and Blackleach Brook - about a kilometre above Robin Hood. No traces remain. It was owned by Lady Manners of Haddon Hall and records confirm its use between 1616-1630

### **Smelting Mill Brook SK 295724**

There is a record that a Ralph Heathcote erected an Ore Hearth "at the upper ford on the Smelting Mill Brook" (now Blackleach Brook) in 1629 without permission (Kierman p204). When the Duke of Rutland the Lord of the Manor heard of it, it was promptly demolished. The site near Clod Hall has not been identified.

### **Heathy Lea Mill SK 27217212**

Heathy Lea Mill is on private property deep in the valley of the Heathy Lea Brook between Baslow and Robin Hood Robin Hood. Today it is a substantial building converted to residential use. There is still a dam and a millpond upstream.

Little is known of its early history. It may have started as a small building for lead smelting in the 1600s or 1700s with a millpond upstream to supply the water power. By the early 1800s it was definitely a corn mill but was abandoned in 1824 when the new park was created around it. In the 1850s it was rebuilt as saw mill by Robert Marples who ran it until his death on 1921. The dam must have been upgraded at the same time. The building remained inhabited by his family for some years and remains private Chatsworth property.

### **Barbrook Ore Hearth SK27267386**

This ore hearth was situated on the north bank of the Barbrook close to the road from Baslow to Owler Bar and slightly downstream from the branch road to Curbar Gap.

Records show that it was built by Robert Mower of Millthorpe in 1618. Little further is known about the site until it was acquired by the Barker family of Bakewell in the late 1750s who then closed it down some time between 1769-1773. It is marked on an early map (Burdet 1791) as a Smelting Mill but it would have been abandoned by then. Later it was re-developed as a corn mill which lasted until the mid 1800s. In the 1900s the site was used as a pumping station to augment the supply of water to Chesterfield. According to J B Ward, the Home Guard demolished it in 1940/41.

## The Site of the Barbrook Ore Hearth



All traces of the smelter and the corn mill have disappeared. Today the main feature is the old millpond with a leat (water channel) which supplied water from the brook. Below the pond is a deep pit which would have housed a waterwheel to drive the 19<sup>th</sup> century corn mill. The footings of a building near the dam are the remains of the pumping station. There are also several platforms or level areas, some of which would have been made for the original smelter. Pieces of slag can be found nearby in the banks of the brook

Access to the early smelter was from the old road from Baslow to Chesterfield (now a farm track) which passed along the flat ground above the site. At least three holloways can still be seen coming down to the mill pond. Note also the guide stoop on the farm track which was erected in the 1720s. It marked a crossing point of a road or pack horse way from Curbar Gap which continued down past the mill and across the Barbrook by a simple bridge or ford. It went on to Gardoms Edge, Old Brampton and Chesterfield

The present main road from Baslow to Owl Bar now the A621, was the turnpike authorised in 1803 and completed some years later. The present ruined bridge over the brook and indeed the corn mill itself, may have been built about the same time.

### Barbrook Slag Hearth SK27197387

There are substantial remains of a slag hearth 200 metres downstream from the ore hearth described above. There are no records relating to this site. No dates are available

Access is from the ore hearth: the track is well built, though the first 20 metres or so have been eroded away. More difficult to find is the leat below the track which supplied water to the slag hearth millpond. This is the first feature noted when reaching the site. It has recently (2017) been cleared of scrubby oak trees. Beyond is the main building, about 20 meters long and 10 across with a main partition across the middle. Of interest is the grey area with no vegetation – the ground is still polluted by fumes from the smelter. Above the site it's a small hut, and a zig zag holloway leading up the road at the top of the hill.



These substantial ruins, untouched by developer or archaeologists, are one of the better examples of a slag hearth in the Peak District.

### **The Slag Hearth**



### **Baslow Cupola SK 267733**

Cupola today is the name of a small group of houses in the valley of the Barbrook on the A621 road to Sheffield about ½ mile from Baslow. The site of the original cupola, the lead smelting furnace, was probably close to and below the road, alongside the footpath leading down to the old pack horse bridge over the Barbrook. The smelter in charge lived in the cottage above the road.

There is little recorded about this site. It was built by John Barker of Bakewell in 1760. It is assumed that it closed in the 1820s or 30s, though the Baslow 1841 Census records a smelter still living in the cottage

The site is conveniently close to Baslow and the turnpike to Chesterfield which was built in 1759. Equally important was a good trackway over the brow of the hill to the coal mine at Robin Hood, only 1.5 kilometres away.

There was and still is a packhorse bridge below the cupola leading to Calver. In its time it would have been convenient for packhorses bringing ore from lead mines in Calver and Hassop. NB there was no main road through Cupola until the 1803 Turnpike to Owlbar

Fairey in his book dated 1811 records a Cupola and Slag Hearth owned by the Barkers of Bakewell. It is possible that he referred to the "Baslow Slag Hearth" described above however it is more likely that the one he referred to was close to the cupola and has now disappeared without trace.

### **Froggatt Smelter SK247772**

There are remains of a smelter hidden in the middle of Froggatt Wood. In the 1600s it was part of Baslow parish, so is included here.

It is small and difficult to find. The path through the middle of the wood crosses several streams, one of which has stepping stones. The site is about 30 meters uphill from this mini ford.

There are no records, but is the possible site of a smelter built by Duke of Rutland in 1679 and operated by John Broomhead of Bubnell.

Today there is small mill pond and dam, with a stone conduit or leat leading down to the remains of buildings, one of which contained the waterwheel. Water still flows down the leat. A beautiful example of a small early lead smelting mill! Specimens of slag can be found in the stream bed at the stepping stones.

### Small lead smelting site in Froggatt Wood



#### Main sources on information

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John Barnatt et al Peak District Mines Historical Society Newsletter Jan 2008

Keirman: Lead Smelting in the Peak District

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