

## **Mendip Lead Mining 1600 - 1900**

The last presentation to the Paulton History Society, given by Colin Budge, was an insight into the history of lead mining in the Mendips during the 17<sup>th</sup> to 19<sup>th</sup> centuries. He defined the area in question as a triangle drawn from Chew Valley Lake running 15 miles westwards along the A368 towards Weston Super Mare, down the A371 to Wells and back up the A39.

Mining of lead ore and its smelting to yield the metal started in this area in 1580. Production reached a first peak of 70 tons per year in 1610. Initially they did not need to sink deep pits as the ore was found quite near the surface. Consequently they only had to clear the undergrowth and dig a shallow trench or groove to be able to raise the ore. Hence they used to describe the process of starting up a pit as “wroughting a groof”.

Because this destroyed the grazing, miners were unpopular with the local livestock farmers

Some of the lead produced was used for plumbing, but a high proportion was used for munitions.

Lead mining was largely seasonal as the mining areas became flooded in winter until techniques were introduced by Thomas Bushel (1594-1674) to drive tunnels underneath the seam to clear the water.

Another difficulty experienced by 17<sup>th</sup> century miners was that of inadequate tools. They did not have the steel picks and shovels one associates with coal mining in later years. Instead they had to manage with tools cut from wood.

Instead of raising the ore from underground to a smelting furnace on the surface, an alternative technique was to excavate a space under the seam and light a wood fire alongside it so that the ore would release molten lead into a container. This necessitated a delay until the metal cooled before they could re-enter the mine to find out how lucky they had been with what they had achieved.

Another technique used later in a factory at Charterhouse when most pits had become exhausted was to employ improved smelting methods to recycle the waste material that had been ditched in earlier years.

A further rejuvenation came in the middle of the 18<sup>th</sup> century when a collection of Cornishmen arrived and settled in the area bringing the benefit of their experience of tin mining. By 1870 this increased production from the mine at East Harptree to 1000 tons per annum.

However this tendency did not continue much beyond the turn of the century because of growing awareness of the health risks of lead poisoning, coupled with the fact that workers were being exposed to what was subsequently estimated to be levels of 1000 parts per million of arsenic (100 times the acceptable limit) in the ground.

The Paulton History Society meets on the third Thursday of the month at 7:30pm in the Wesley Hall. Further details are available from the secretary Dr Anne Miall on 412051.