41 Dukesfield

Theme: Heritage and mining

Location

South of the hamlet called Juniper, which is south of Hexham. A 400 metre walk upstream from the bridge over the Devil's Water [NY 942 580].

Description

The most striking remains of one of the region's largest lead smelting mills stands quietly in a wood beside the Devil's Water at Dukesfield.

Two elegant arches are the most visible evidence of an industry that was the backbone of the south Northumberland economy. It smelted lead ore (called galena), that was mined in the Pennine hills to the south, into ingots of lead.

The Dukesfield smelting mill was built around 1665 and continued to process lead and silver from ore until 1835. The veins of galena — the source of the lead and silver — were once hot, mineral-rich fluids, heated by a granite under the Pennines; the fluids filled cracks and fractures in Carboniferous sedimentary rocks around 290 million years ago.

The Dukesfield smelting mill was most active during the Napoleonic wars — between 1803 and 1815. This mill and others were in the ownership of the very old and very wealthy Blackett and Beaumont families.

It was sited where supplies of lead ore were near and the market and transport were also close — the wharves of Newcastle. Plus there was coal and water to power the machines and furnaces. Pack horses took the galena down from the hills to the smelter and then the refined lead onto Newcastle.

Despite consolidation works, tree seedlings of many different species are growing in the masonry as woodland tries to reclaim the site. A variety of herbs are also present — in late summer there are harebell and devil's-bit scabious, and heather nearby.

Photographs

(Photo 41-1) Dukesfield lead smelting mills.

(Photo 41-2) The arches at Dukesfield, part of the former lead smelting mills.



(Photo 41-1) Dukesfield lead smelting mills.



(Photo 41-2) The arches at Dukesfield, part of the former lead smelting mills.