

## EXTRACT FROM ENGLISH HERITAGE'S RECORD OF SCHEDULED MONUMENTS

MONUMENT: Magpie, Dirty Red Soil, Maypit, Horsesteps and Great Red Soil lead mines and a limekiln, 590m south east of Johnson Lane Farm

PARISH: ASHFORD IN THE WATER  
SHELDON

DISTRICT: DERBYSHIRE DALES

COUNTY: DERBYSHIRE

NATIONAL MONUMENT NO: 29976

NATIONAL GRID REFERENCE(S): SK17266812

### DESCRIPTION OF THE MONUMENT

The monument includes the earthwork, buried, standing and rock cut remains of Magpie, Dirty Red Soil, Great Red Soil, Maypit and Horsesteps lead mines. The monument is situated on a limestone plateau, 700m south of Sheldon village at approximately 310m above sea level and is defined on all sides by stone walling.

It is unclear when the mines were first worked but documentation dating from 1682 records the official opening of Shuttlebark vein, an ore deposit which runs roughly east to west through the centre of the monument. The title of Magpie Mine was first used in 1740 in records relating to ore production and profitability. Throughout the 18th century the mine was worked by various individuals and partnerships and in 1790 Magpie Mine was the largest producer in the district. During the second half of the 18th century several other mines in the area became active including Dirty Red Soil. This period of success was however short-lived and a decline in lead prices saw the closure of the mine in 1793.

Magpie Mine was reopened around 1800 and the title extended to include other, at that time, unworked veins. Following the sinking of the main shaft and the installation of a Newcomen type engine, the mine flourished. By 1824 Magpie Mine was one of the most profitable in Derbyshire. In the same year, however, the mine became the subject of a violent dispute over ownership with the neighbouring Maypit Mine. A combination of a slump in trade, the cost of legal representation during the disputes, and flooding led to the closure of Magpie mine in 1835.

In 1838 Magpie Mine amalgamated with Great Red Soil Mine and a year later John Taylor, the most respected mine manager in the country took over. Taylor introduced large scale and efficient working methods and was responsible for many of the standing buildings visible on the site today. One improvement was the installation of a second hand Cornish engine which doubled the power of the earlier Newcomen engine. Despite Taylor's improvements there was still a problem with drainage and by 1868 the mine was passed to John Fairburn. By 1881 Magpie Sough had been built to serve as a pumpway for water from the mine. The sough took water from the mine to the River Wye approximately one

mile north of the monument. The expense of building the sough caused financial difficulties and the mine suspended operations again in 1883.

Following intermittent interest by various companies in the early 20th century Magpie Consolidated Mines started working the site in 1950. They were responsible for replacing the wooden headgear with that of steel which is still visible on the site today. The mine finally closed in 1958.

The mines would have been worked under the jurisdiction of the Barmote Courts, the legal administrative unit governing Derbyshire lead mining. The Derbyshire system of mining was largely based on local mining customs and consisted of individual groups of miners or small mining companies working from shafts sunk along the vein.

The monument includes a concentration of surface remains representing the history of lead mining at Magpie, Dirty Red Soil, Maypit, Horsesteps and Great Red Soil Mines. They survive as a series of engine and climbing shafts, gin circles (remains of horse powered winding apparatus), a powder house (used for storing gunpowder), an engine reservoir (provided boiler and cooling water for the Cornish engines), ruined coes (stone built shelters or sheds), hillocks (mounds of waste rock which either contain insufficient quantities of ore to warrant extraction or waste from ore crushing activity), open cuts (veins worked open to daylight), rake workings (extraction and ore processing works which follow the line of an ore deposit) flues, drains, tramways and a section of the Magpie sough. In addition to features representing extraction processes those representing ore processing also survive. These include a crushing circle (housing for a crushing wheel used for crushing ore), dressing floor and washing floor (processing areas) slime ponds (where poisonous sediment from dressing process was allowed to settle) and buddle dams (large earth dams into which was placed the dirt and sludge resulting from buddling operations (ore washing)).

The original Magpie Mine lies to the south of the Agents House and Smithy which were constructed by John Taylor in the 1840s. The 17th century climbing and founder shafts are both visible on the surface. Magpie mine was moved to its current position in the early 19th century and is centred at grid reference SK17256814. The area is characterised by a number of prominent buildings which are laid out around the main shaft. This was sunk in 1823 and is now defined by steel headgear which was erected in the 1950s. With the exception of the corrugated iron winding house, which lies to the south of the main shaft and dates to the 1950s, most of the other buildings were constructed between 1840 and 1869 when John Taylor was managing the mine. All the buildings are constructed of limestone and although most are ruinous some survive to their original height. The 1840s witnessed the most widespread change with the construction of a circular chimney, powder house and engine reservoir to the north of the main shaft and a winding house and square chimney to the south. The winding house has since been demolished but its position can still be defined on the ground. The square chimney is connected via a flue to the boiler house. The opening to the flue is blocked with an iron grill but the remainder is visible on the surface as a raised grass bank with patches of exposed stone walling. A winding engine house, situated adjacent to the boiler house, and an engine house, of Cornish design, situated immediately north of the main shaft were both built in 1869 and survive, at least in part, to their full height.

Approximately 60m north west of the main shaft lie slime ponds and a dressing floor. These are defined on the surface by low banks and appear as large rectangular features with slightly sunken centres. Just south of these is a ruined stone built ore coe and approximately 40m further south are the degraded remains of a crushing circle and washing floor. The latter two

features are not clearly discernable on the ground and may have been degraded during the latest stages of working at the site.

The remainder of Magpie Mine is characterised by a series of shafts and hillocks, buddle dams and open cuts. These extend both east and west of the concentration of buildings. Approximately 100m west of the Main Shaft lies Shuttlebark Engine shaft which was sunk in the 1760s. This was served by a gin circle which survives to the north of the shaft, as a raised, circular mound with a flattened top. Another distinctive feature of this mine is the Magpie Drain. This runs from the washing floor north westwards to the edge of the area of protection. The drain, which was in use by the early 19th century, survives as a low bank with a narrow flattened top. Approximately 100m east of the Main Shaft lies Crossvein Shaft which was sunk in 1833. This is accompanied by a gin circle which lies to its south along with a coe and other ruinous structures.

Magpie sough runs underground from the main shaft westwards to the dressing floor where it turns to the north east and continues to the River Wye. Only the section lying within the area of protection is included in the scheduling. Dirty Red Soil Mine is centred at SK 17336798 and is enclosed by a circular stone wall approximately 40m in diameter. The mine is characterised by a single, collapsed shaft with a gin circle to its south. South and west of the stone wall are the visible remains of other shafts and open cuts but it is not known whether these were worked as part of Dirty Red Soil Mine. A tramway running from Dirty Red Soil Mine towards Magpie Main Shaft is evident as a low turf covered bank.

Horsesteps Mine is centred at grid reference SK17476804 on the eastern edge of the area of protection. The mine is characterised by a shaft, enclosed within a coe, and a second shaft, now partly collapsed, to its north. The whole complex lies within an area of hillocks.

Centred at grid reference SK17426807 is a series of structures representing both Great Red Soil and Maypit Mine. It was in this area that quarrels over ownership began when Magpie miners broke through to Maypit Mine in what both claimed to be their own vein. In 1829 Magpie miners were able to prove conclusively that they owned the vein. Maypit miners also worked the adjacent Great Red Soil Mine which itself became the centre of debate when Magpie miners broke into Great Red Soil, a vein which had definitely been freed (claimed) long before. This dispute became violent and ended with three Great Red Soil miners losing their lives and others being injured.

These mines are characterised by a series of hillocks, engine and climbing shafts, a coe, a gin circle and a pond. A replica horse gin has been erected on the site of the Great Red Soil engine shaft which was originally sunk in 1831.

Close to the northern edge of the monument the remains of a limekiln are visible adjacent to the 19th century engine reservoir. The structure, which is partly covered in grass, appears dome shaped with an entrance on the southern side. The entrance is open to the surface but partially buried.

All modern surfaces, electricity poles, concrete and metal shaft caps, the reconstructed gin circle, Agents House and Smithy are excluded from the scheduling, although the ground beneath these features is included.

#### ASSESSMENT OF IMPORTANCE

Approximately 10,000 lead industry sites are estimated to survive in England, spanning nearly three millennia of mining history from the later Bronze Age

(c.1000 BC) until the present day, though before the Roman period it is likely to have been on a small scale. Two hundred and fifty one lead industry sites, representing approximately 2.5% of the estimated national archaeological resource for the industry, have been identified as being of national importance. This selection of nationally important monuments, compiled and assessed through a comprehensive survey of the lead industry, is designed to represent the industry's chronological depth, technological breadth and regional diversity.

Nucleated lead mines are a prominent type of field monument produced by lead mining. They consist of a range of features grouped around the adits and/or shafts of a mine. The simplest examples contain merely a shaft or adit with associated spoil tip, but more complex and (in general) later examples may include remains of engine houses for pumping and/or winding from shafts, housing, lodging shops and offices, powder houses for storing gunpowder, power transmission features such as wheel pits, dams and leats. The majority of nucleated lead mines also included ore works, where the mixture of ore and waste rock extracted from the ground was separated ('dressed') to form a smeltable concentrate. The range of processes used can be summarised as: picking out of clean lumps of ore and waste; breaking down of lumps to smaller sizes (either by manual hammering or mechanical crushing); sorting of broken material by size; separation of gravel-sized material by shaking on a sieve in a tub of water ('jigging'); and separation of finer material by washing away the lighter waste in a current of water ('buddling'). The field remains of ore works vary widely and include the remains of crushing devices, separating structures and tanks, tips of distinctive waste from the various processes, together with associated water supply and power installations, such as wheel pits and, more rarely, steam engine houses.

The majority of nucleated lead mines with ore works are of 18th to 20th century date, earlier mining being normally by rake or hush and including scattered ore dressing features (a 'hush' is a gully or ravine partly excavated by use of a controlled torrent of water to reveal or exploit a vein of mineral ore). Nucleated lead mines often illustrate the great advances in industrial technology associated with the period known as the Industrial Revolution and, sometimes, also inform an understanding of the great changes in social conditions which accompanied it. Because of the greatly increased scale of working associated with nucleated mining such features can be a major component of many upland landscapes. It is estimated that several thousand sites exist, the majority being small mines of limited importance, although the important early remains of many larger mines have often been greatly modified or destroyed by continued working or by modern reworking. A sample of the better preserved sites, illustrating the regional, chronological and technological range of the class, is considered to merit protection.

Magpie, Dirty Red Soil, Great Red Soil, Maypit and Horsesteps lead mines is one of the most complete examples of a Derbyshire lead mine. The monument represents a long period of use and this is reflected in the range and diversity of features present. The continuity in use is evident in both ore extraction and ore processing features. The preservation of the remains combined with the documented history of the site makes it a very important multi-period monument illustrating the development of a typical Derbyshire mining tradition and 19th century Cornish mining influence.

#### SCHEDULING HISTORY

Monument included in the Schedule on 15th January 1974 as:

COUNTY/NUMBER: Derbyshire 233

NAME: Magpie Mine

The reference of this monument is now:

NATIONAL MONUMENT NUMBER: 29976

NAME: Magpie, Dirty Red Soil, Maypit, Horsesteps and Great Red Soil lead mines  
and a limekiln, 590m south east of Johnson Lane Farm

SCHEDULING REVISED ON 09th March 2001