

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

MONUMENT: Gorseydale lead mines, 300m north and 650m north west of Moor Farm

PARISH: BONSALL

DISTRICT: DERBYSHIRE DALES

COUNTY: DERBYSHIRE

NATIONAL MONUMENT NO: 30942

NATIONAL GRID REFERENCE(S): SK25225941  
SK24885971

### DESCRIPTION OF THE MONUMENT

The monument lies approximately 0.5km south east of the village of Winster and occupies land to the south of Bonsall Lane, and east of Bonsallmoor Lane. It includes the ruins, earthworks and buried remains of the Gorseydale lead mines within two areas.

Mining was taking place at Gorseydale by at least 1745, when the Hangworm Mine was operating, but mining of an earlier date is also indicated by the primitive character of the workings. The area was mined intensively: around 50 individual mines were sunk in an area of about a square kilometre, some with distinctive names such as Dirty Face and Have Nothing Grove. The Gorseydale mines are notable for the early attempts made to sink shafts to deeper levels by exploring and developing new technologies of excavation, ventilation and drainage. References to a Gorseydale mine called Catchwind Grove in 1789 suggest that a funnel-like structure had been erected over a shaft to direct wind downwards for ventilation: at Hangworm Mine a small shaft sloping into the main shaft has been interpreted as a ventilator, requiring a fire basket in the small shaft and an enclosing structure over it to create a draught. These shafts will retain surface remains which contribute to the understanding of the industry, including collapsed structures used for storage or to aid ventilation, and gin circles, horse powered rotating mechanisms for winding and pumping.

The southern area of remains lies at the top of sloping ground, and has been intensively worked. It includes many shafts of varied size and type, with associated earthworks and ruined structures throughout the area. Some of these shafts form alignments following lead bearing veins. A particularly large and well preserved shaft, about 2m in diameter, in the north east corner of this area is believed to be part of the well known Hangworm Mine, which has extensive underground workings. This shaft is stone lined and has a large gin circle. It has been capped and has an access grille and concrete surround. Elsewhere in the area, many shafts have well defined shaft mounds formed by upcast, to a height of about 2m. Several have ruined coes (small storage buildings) of roughly square plan surrounding the shaft opening and spoil tips are visible throughout the area. Concentrated in the east of the area and extending into a small field at the south east corner are shallower workings. These are visible as numerous small pits and hillocks on a roughly north-south

alignment. Their worn appearance and relatively simple form, and the absence of structures or gin circles suggest that these workings belong to an earlier phase of mining than the larger shafts.

The northern area of remains lies immediately south of Bonsall Lane at the foot of a slope rising away from the two roads. It includes an area of well preserved remains including numerous shafts with shaft mounds and has been intensively worked. Some of these are stone lined, and one partly collapsed shaft in the east retains a gin circle of 9m-10m diameter. In the south east, close to the field wall which forms the eastern boundary of these remains, is a shaft whose mound is C-shaped rather than enclosing the shaft completely, it lies close to a trackway, indicating that ore may have been loaded directly from the shaft onto a cart and transported down the slope to ore processing areas.

In the area immediately south of Bonsall Lane lies a set of stone built compartments called bouse teams, where ore was stored prior to processing. At least four bouse teams are seen, standing to a height of about 0.4m and facing west. These are extremely unusual survivals in Derbyshire. Their presence and location next to a relatively flat piece of ground with low earthworks, indicates that this area served as a dressing floor, where the ore would be processed to separate as much lead as possible from the raw material brought up from the mine. Dressing waste and other features will survive as buried features in this area.

All fence posts, electricity poles and the access grille with concrete surround are excluded from the scheduling, although the ground beneath them 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 flat rod systems, transport systems such as railways and inclines, and water power and water supply features such as wheel pits, dams and leats. The majority of nucleated lead mines also included ore works where the ore, once extracted, was processed.

The majority of nucleated lead mines are of 18th to 20th century date, earlier mining being normally by rake or hush (a gully or ravine partly excavated by use of a controlled torrent of water to reveal or exploit a vein of mineral ore). They 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 upland landscapes. It is estimated that at least 10,000 sites exist, the majority being small mines of limited importance, although the important early remains at many larger mines have been greatly modified or destroyed by continued working or modern reworking. A sample of the better preserved sites, illustrating the regional, chronological and technological range of the class, is considered to merit protection.

The Gorseysdale monument represents a remarkable survival of the lead mining remains which were once central to the Derbyshire economy and characteristic of the industry as a whole. Their archaeological importance lies primarily in their technological content: the monument incorporates a range of features which will allow detailed interpretation of mining technology above and below ground. They will preserve much valuable information about the development of mining technology at a critical transitional period. Comparisons between the workings of different dates on the monument will allow technological analysis and a better understanding of the history of lead mining nationally.

Coes and other structural remains will retain evidence for the operation of shafts and activities that took place around the shaft head. This will contribute to an understanding of the history of Gorseysdale mines and that of the Derbyshire lead industry in general. The monument is therefore especially valuable as an illustration of technical development, containing information on shaft construction, power technology and transport within the mine complex. In addition, Gorseysdale mines were the setting for the highly influential geological studies of Pilkington and Whitehurst in the late 18th century. In particular, Hangworm Mine was used as an illustration of geological formation processes.

MONUMENT INCLUDED IN THE SCHEDULE ON 23rd June 1997