

EXTRACT FROM ENGLISH HERITAGE'S RECORD OF SCHEDULED MONUMENTS

MONUMENT: Remains of Nether Ratchwood and Rantor lead mines, 200m west of Old Lane

PARISH: WIRKSWORTH

DISTRICT: DERBYSHIRE DALES

COUNTY: DERBYSHIRE

NATIONAL MONUMENT NO: 24986

NATIONAL GRID REFERENCE(S): SK28395493

DESCRIPTION OF THE MONUMENT

The monument includes the remains of two adjacent lead mines, Ratchwood mine to the west and Rantor mine to the east, each containing a group of structures and earthwork features produced by mining and ore processing. The west side of Ratchwood mine is marked by several ruined buildings, together with a large circular stone walled ore storage bay measuring 10m in diameter.

To the east of these there is a flat area of ground containing at least two capped shafts and the earthworks of a gin circle. The east side of the mine is formed by a group of tips of mine spoil and ore dressing waste, fanning out to the east, and including a terraced ore dressing area. The area between the two mines contains a well preserved stone lined shaft capped with concrete sleepers, a tip of ore dressing waste, and scattered mining related earthworks. The remains of Rantor mine are smaller and confined within a triangular walled enclosure. They include a ruined building (a miners' coe) on the west side, two shafts, and tips of mine spoil and ore dressing waste. The mines are known as Ratchwood and Rantor on 1st edition OS, but as Nether Ratchwood and Orchard Shafts in earlier documentary sources. They were sunk in the 1740s and remained active until the 1860s.

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.

The mines at Ratchwood and Rantor are well preserved examples of early nucleated mines with ore works. They serve to illustrate the change in surface form associated with the spread of mining from exposed veins to those capped by sterile shale, and show a good diversity of features for mines of this date and type. The stone storage bay is a rare feature. The history of the monument is well documented.

MONUMENT INCLUDED IN THE SCHEDULE ON 05th September 1996