

EXTRACT FROM ENGLISH HERITAGE'S RECORD OF SCHEDULED MONUMENTS

MONUMENT: Cop Rake and Moss Rake lead mines 750m north east of Wheston House

PARISH: BRADWELL
CASTLETON
PEAK FOREST
TIDESWELL

DISTRICT: DERBYSHIRE DALES
HIGH PEAK

COUNTY: DERBYSHIRE

NATIONAL MONUMENT NO: 29969

NATIONAL GRID REFERENCE(S): SK12828006 - SK13377997
SK13867977
SK13108004

DESCRIPTION OF THE MONUMENT

The monument includes the earthwork, buried, standing and rock cut remains of Cop Rake and Moss Rake, post-medieval lead mining complexes which include the sites of Starvehouse Mine, New York Mine and Cop Mine. The monument is defined in three areas of protection. The term rake is given to extraction and ore processing features which follow the line of a lead bearing vein. This was a typical form of lead mining in the Peak District. Cop Rake and Moss Rake are aligned roughly east to west and follow the line of lead bearing veins which cut across the Bee Low Limestones.

Cop Rake has been worked since at least the 13th century when there are records documenting the working of Cop Rake, or Wardlow Cop as it was then known. Parts of Moss Rake have been worked from at least the 1670s and probably much earlier but work at both rakes had ceased by 1880 when the Ordnance Survey map records these as areas of old lead mining.

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 relatively short lengths of the vein.

The monument survives as a series of earthwork, buried, standing and rock cut remains which are characterised by lengths of long, deep open cuts (veins worked open to daylight) and hillocks (mounds of waste rock which either contain insufficient quantities of ore to warrant extraction or waste from ore crushing activity) interspersed with the remains of mining shafts, an engine shaft and a gin circle.

At the western end of the monument, in the largest of the three areas of protection, is a series of well preserved hillocks and open cuts. This area is known as Starvehouse Mine and extends for approximately 160m east from the

western end of the monument. The characteristics of the hillocks and open cuts continue to the east into the parish and liberty of Castleton. A liberty in mining terms is a district in which the miner worked and was usually, although not always, defined by parish boundaries. The liberty was governed by a set of laws and customs. Bradwell, Peak Forest and Castleton liberties all converge on Cop Rake in a section recorded as New York Mine and marked on the Ordnance Survey map as Cop Round.

In Bradwell liberty the lead working remains are different in character. Here a single, deep open cut vein dominates the rake and continues from the parish boundary to the eastern end of the first protected area. The waste heaps from lead mining along this section of the rake are set back from the edge of the open cut vein. The form of these remains is very distinctive and is indicative of 13th century workings. Centred at national grid reference SK13208003 is a concentrated area of activity where surface remains include a number of small climbing shafts, a bridge, sections of walling, an engine shaft and a gin circle (remains of horse powered winding apparatus). This area of activity represents later working of the lead vein and preserves important information about the historical and technical development of the Cop Rake lead mines. Traces of the open cut, and buildings relating to Cop Mine itself, are visible beyond the edge of the protected area but there has been some relatively modern reworking for fluorspar in this area which has caused degradation of the earlier remains. This section is not therefore included in the scheduling.

In the second area of protection centred at national grid reference SK13757997, is another area of Cop Rake which is again different in character from that at the western end. Here the remains cover a broader area and are less linear in form. The remains are characterised by very large waste hillocks and two shafts, now covered. This difference in form may be indicative of either another phase of lead working or of a variation in the form of the lead vein itself, resulting in a different method of extraction. A small section in the centre of the protected area has been subjected to recent fluorspar exploration but despite material from this having been deposited around the area, the majority of the lead mining hillocks are still intact. Around the centre of this area of protection is also a concrete lined dew pond which was marked on the 1880 Ordnance Survey map. This is presumed to post date the abandonment of the mining when the land returned to agricultural use.

In the third area of protection centred at national grid reference SK13907980 are the lead mining remains of Moss Rake. At its eastern end the rake is characterised by the main lead vein and a smaller subsidiary vein which branches off to the south. The main vein has been worked as a long, deep open cut similar in form to that at the western end of Cop Rake, with the waste hillocks again set back from the edge of the vein. The smaller vein is marked by a series of hillocks interspersed by shafts, one of which is capped, and shallow open cut gullies. At the western end of this area of protection is a small concentrated area of activity with unusual surface remains. These features are situated on a terrace and have survived the modern open cast fluorspar terrace and extraction which has removed other lead mining remains to the west of the area of protection. One of these features is evident as three concentric circles each marked by low banks and slight internal ditches. The circle is approximately 8m in diameter and is interpreted as the remains of a crushing circle. Although unusual in form two other similar crushing circles have been recorded on Dirlow Rake in Derbyshire. Crushing circles were used to crush the ore ready for further treatment.

Just to the north west of the crushing circle is a rectangular sunken feature which is defined by banks and sub-divided internally by another low bank. A large ditch surrounds the feature but is divided by a row of stones. The

feature is interpreted as a slime pond. Slime ponds were used in the final stage of ore processing in an attempt to prevent the escape of waste water contaminated by lead.

All modern track surfaces, fences, stiles and gates, and the dew pond are excluded from the scheduling, although the ground beneath all 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.

Lead rakes are linear mining features along the outcrop of a lead vein resulting from the extraction of relatively shallow ore. They can be broadly divided between: rakes consisting of continuous rock-cut clefts; rakes consisting of lines of interconnecting or closely-spaced shafts with associated spoil tips and other features; and rakes whose surface features were predominantly produced by reprocessing of earlier waste tips (normally in the 19th century). In addition, some sites contain associated features such as coes (miners' huts), gin circles (the circular track used by a horse operating simple winding or pumping machinery), and small-scale ore-dressing areas and structures, often marked by tips of dressing waste.

The majority of rake workings are believed to be of 16th-18th century date, but earlier examples are likely to exist, and mining by rock-cut cleft has again become common in the 20th century. Rakes are the main field monuments produced by the earlier and technologically simpler phases of lead mining. They are very common in Derbyshire, where they illustrate the character of mining dominated by regionally distinctive Mining Laws, and moderately common in the Pennine and Mendip orefields; they are rare in other lead mining areas. A sample of the better preserved examples from each region, illustrating the typological range, will merit protection.

Cop Rake and Moss Rake lead mines 750m north east of Wheston House are well preserved and include a diverse range of components relating to the mining of these veins. Rake workings are now rare and this example is reasonably well preserved. The standing, earthwork, buried and rock cut remains provide evidence for both the historical and technological development of what was once a far more extensive, multi-period mining landscape. The wide range of mining and processing features combined with the historical documentation will enable the development of the mine working and its chronological range to be reconstructed. The rakes, shafts, hillocks and other extraction features provide evidence for successive methods of extraction whilst other processing areas will contain deposits showing the effectiveness of these techniques. The mining remains also provide an insight into the Derbyshire Barmote Court system of mining and the constraints this imposed on the miners of the area. The fact that three mining liberties converge at Cop Rake and each exhibits a slightly different pattern of working is of particular note.

MONUMENT INCLUDED IN THE SCHEDULE ON 20th June 2000