

EXPLORATION OF CROMFORD MOOR MINE, STEEPLEGRANGE, WIRKSWORTH

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Abstract: Exploration of the shaft and some of the workings was undertaken by members of Operation Mole in late 1989 and early 1990, in order to help provide information for its interpretation. The shaft, around 128 metres deep, was found generally to be in good condition, descending into large open stopes. The lowest accessible fifteen metres was made dangerous by suspended debris, but a level off just above gave access to passage and a winze sunk by Operation Mole in the 1960s. Attempts to reopen the winze have been left for a future occasion.

INTRODUCTION

Cromford Moor Mine is at SK 292557, adjacent to the Black Rocks Car Park and picnic site, at Steeplegrange on the Cromford-Wirksworth boundary. The shaft is a few metres from the ruined mine buildings and chimney that have been preserved there, close to the present day Information Centre.

The mine was last entered by members of Operation Mole in the early 1960s when an abortive attempt was made to gain access to the level of Cromford Sough. Their activities were terminated by the pouring of a ton of concrete over the access lid! This concrete cap has stood undisturbed since.

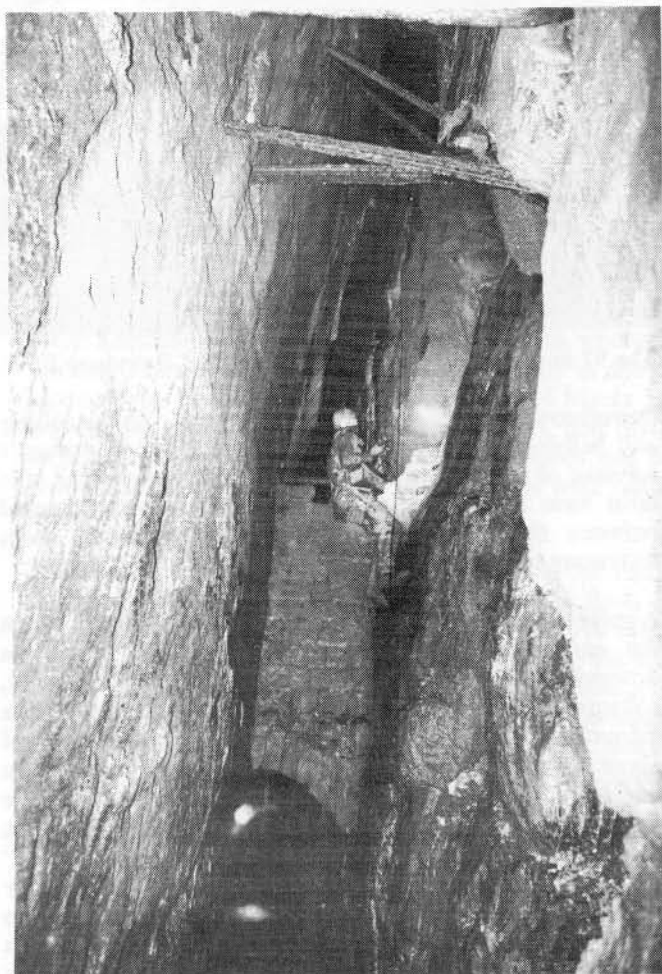
The purpose of the present exploration was to investigate the condition of the shaft, which is next to a footpath, and to provide data and photographs for its eventual interpretation by Derbyshire County Council. Its position at Black Rocks together with the preserved mine buildings, provides an ideal opportunity for a small display in the adjacent visitor centre, to feature the once important complex of mines on the Gang Vein, whilst the shaft may eventually be gridded and illuminated electrically.

EXPLORATION 1989/90

Following discussions with Derbyshire County Council Planning Department, Operation Mole were granted a limited period of time during which the mine was to be accessed and explored. Public safety was paramount in light of the shaft's position and in this respect the lid was welded down at the end of each day's work and the area securely fenced at all times.

Operation Mole members gathered on site on 2 December 1989 to remove the concrete cap. Rumours that a mere "skimming" of concrete covered the lid were soon dismissed and eventually 450 mm of very strong concrete was removed. The unscrewing of four nuts revealed a fine, oval shaft, the dimensions of which are roughly 1.5 x 1m of coursed gritstone construction.

The ginging extends to some 7.4m depth and is of a consistent shape and dimension, its base resting on a secure shale ledge. The shale continues for a further 31.6m, at which point limestone and impressive stope workings are entered. The vein runs roughly east-west on an average



View east (90m) showing open stope and "flying buttress".

bearing of 267° with a width varying between 1m and 2.5m. The vein has been completely stoped out both by the lead miners of the last three centuries, and latterly by the miners of calcite in the 1920s. Only a few false floors and occasional packs standing on now rotten stemples obstruct the particularly open view during the winched descent. Generally the stope is open some 50m to both east and west of the line of descent.

The stope hades at a shallow angle to the south throughout its length and there is evidence at the shale boundary and in slickensiding that the vein was faulted. Displacement of the limestone/shale boundary across the stope may show a



The 97 m level, showing slickensiding and flowstone floor.



Winze leading to levels below 97m.

downtthrowing of the southern hanging wall. Slickensiding and bellying of the vein walls can also be seen during a traverse of the accessible workings. The hade of the vein must have made winding difficult and a kibble jammed between the walls of the stope at 60m depth bears testimony to this.

A relatively solid level is reached at about 97m (320ft) on the eastern side of the stope. The shaft continues downwards below this point for a further 17m. However, collapse of false floors and packs has made the lower area extremely unstable. A working level had been developed at about 103m (340ft) to both the east and west; however, the instability of that area precluded access. Originally the shaft is recorded to have been a total of 128m (420ft) deep.

Opposite the level at 97m, (which formed the landing for winching operations) there can be seen a particularly fine ashlar gritstone "flying buttress" which, judging from its construction across the stope must, at one time, have been associated with another important working level, most evidence of which has now disappeared.

Following the 97m level in an easterly direction some 60m of passage is accessible. The level is of walking height with a considerable amount of limestone deads forming the roof: packed material forms the floor. Two open winzes appear in the floor (3.5m and 6m depths) connecting with the level below. Descent of the winze at the end of the level allows the lower level to be followed a further 20m to the probable point of the final winze which leads into the lowest level of the mine.

This final winze was reopened by a group of miners in the 1920s as an access to the sole of the mine along which they explored and saw both the remains of a water wheel and

the mouth of Cromford Sough. During Operation Mole's exploration of the mine in the 1960s a sketch survey was drawn by one of the surviving calcite miners which shows a remarkable accuracy when compared with the existing workings.

The area around the top of this final winze is very unstable being formed not only of limestone deads but also containing a large volume of decayed shale which had fallen down the stope. As a result of this poor ground the winze had totally collapsed by the 1960s and both the past and present attempts by Operation Mole to re-sink it have failed.

A full survey and exploration of the mine has yet to be carried out, it is hoped that this will be done during the next winter season.

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