

DISCOVERY OF A CAVERN ON CROSSLAW RAKE, FOOLOW, DERBYSHIRE

by

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The existence of large natural caverns at Foolow has long been suspected, although, except for a penetration into the Waterfall Swallet system, no caves have been reported in this area.

The historical evidence is based almost entirely upon the survey of Derbyshire by Farey in 1811 (1). In his lists of lead mines and "remarkable Natural CAVERNS and Holes in the Rocks" we find:-

"Crosslaw Rake, in Foolow, near Eyam,
in 1st Lime, Lead, a large Cavern."

and:

"Crosslaw Mine Cavern, in Foolow, near Eyam, in
1st Lime: Ore was dressed in this Cavern,
instead of being drawn to the Hillock."

This was the information available, when during the latter part of 1962 Mr. W. Broadbent of Calver uncovered a shaft whilst hillocking for fluorspar on Crosslaw Rake. This shaft was descended by members of the Peak District Mines Historical Society in the spring of 1963 and a natural cave system discovered and surveyed.

The entrance shaft (marked as S on the area plan) is situated on Crosslaw Rake a few yards north of the Foolow-Eyam road, about 450 yards east of Waterfall Farm. The entrance shaft is 80 feet deep and quite narrow, especially near the surface, although the shaft is quite extensive laterally along the vein. At the foot of the shaft a roomy chamber is reached after landing on a large rubble heap. Workings along Crosslaw Rake can be explored at the foot of the shaft, but these are only of small extent. Traversing along the vein higher up in the shaft does not lead to any working of any significance.

A steep downward slope to the south-west leads to a very wide natural chamber having miners' deads packed nearly to the roof at the sides, with a 4 foot wide and 3 foot high channel left down the centre. The passageway now divides into a "T" junction, the left hand branch leading to a level mined along a small scrip vein, the right hand branch also leading to a similar level and containing a horizontal extension of the cavern. The cavern continues steeply downwards through a very low muddy passage of very wide extent. An oxbow is formed here by a small chamber to the right. Eventually a large, but very low chamber is reached, having a horizontal, water-worn roof and a washed mud floor. At the far end the roof and floor dip, but it is not possible to proceed further. The lowest part of the cavern is 140 feet below the surface.

Nowhere in the cavern can a solid rock floor be seen and it is evident that in the higher parts of the cavern, and may be in the lower parts, the chambers were originally much larger in both vertical and horizontal extent. In reality the whole series is one large chamber which has been filled in to such an extent that it has become subdivided into several "chambers" and "passages".

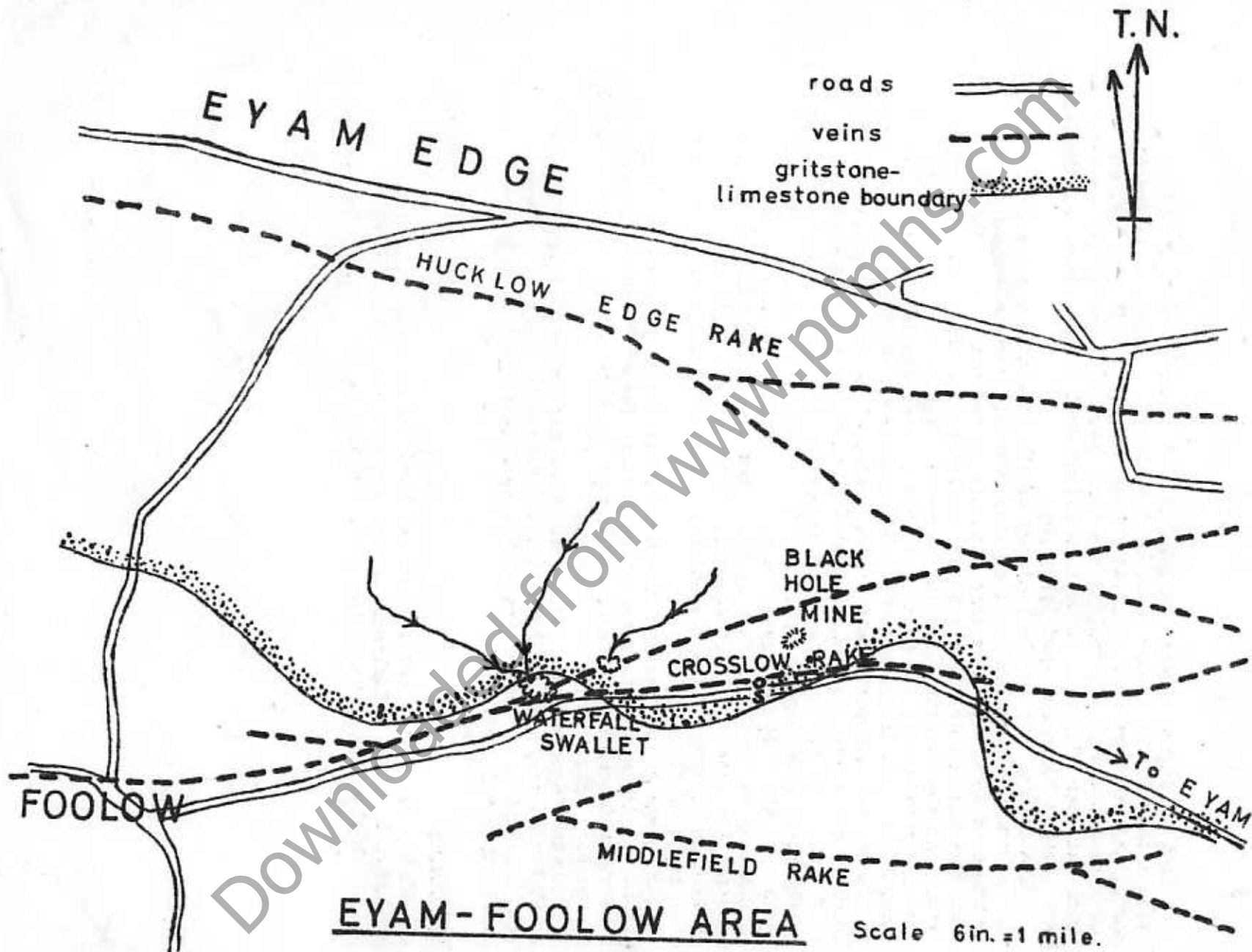
The cavern lies on the boundary of the Carboniferous Limestone with the gritstone and shales. Along this boundary streams rising on the gritstone of Eyam Edge sink into swallets on reaching the limestone, e.g. Duce Hole at Grindlow and the two large sink holes near Waterfall Farm. At the Waterfall Swallet entry has been gained into a cave system approximately 150 feet deep, but of very limited horizontal extent (2). It is thought that the main stream which resurges at Stoney Middleton, has not yet been reached. Also along the limestone-gritstone boundary are several shakeholes, most of them now inactive except in time of flood. One of these is situated between the Crosslow Cavern and the nearby Black Hole Mines. This may be conveniently called Black Hole Swallet. The Crosslow Cavern seems to be part of a cave system originating at the Black Hole Swallet, and since the latter has become inactive the cavern has subsequently filled up with silt and mud, assisted of course by the lead miner. The lower parts of the cavern show signs of flooding.

No signs of ore washing floors or spoil heaps are evident in the cavern, so it is open to speculation whether the cave system discovered is Farey's Crosslow Mine Cavern, although it is certainly in approximately the correct position.

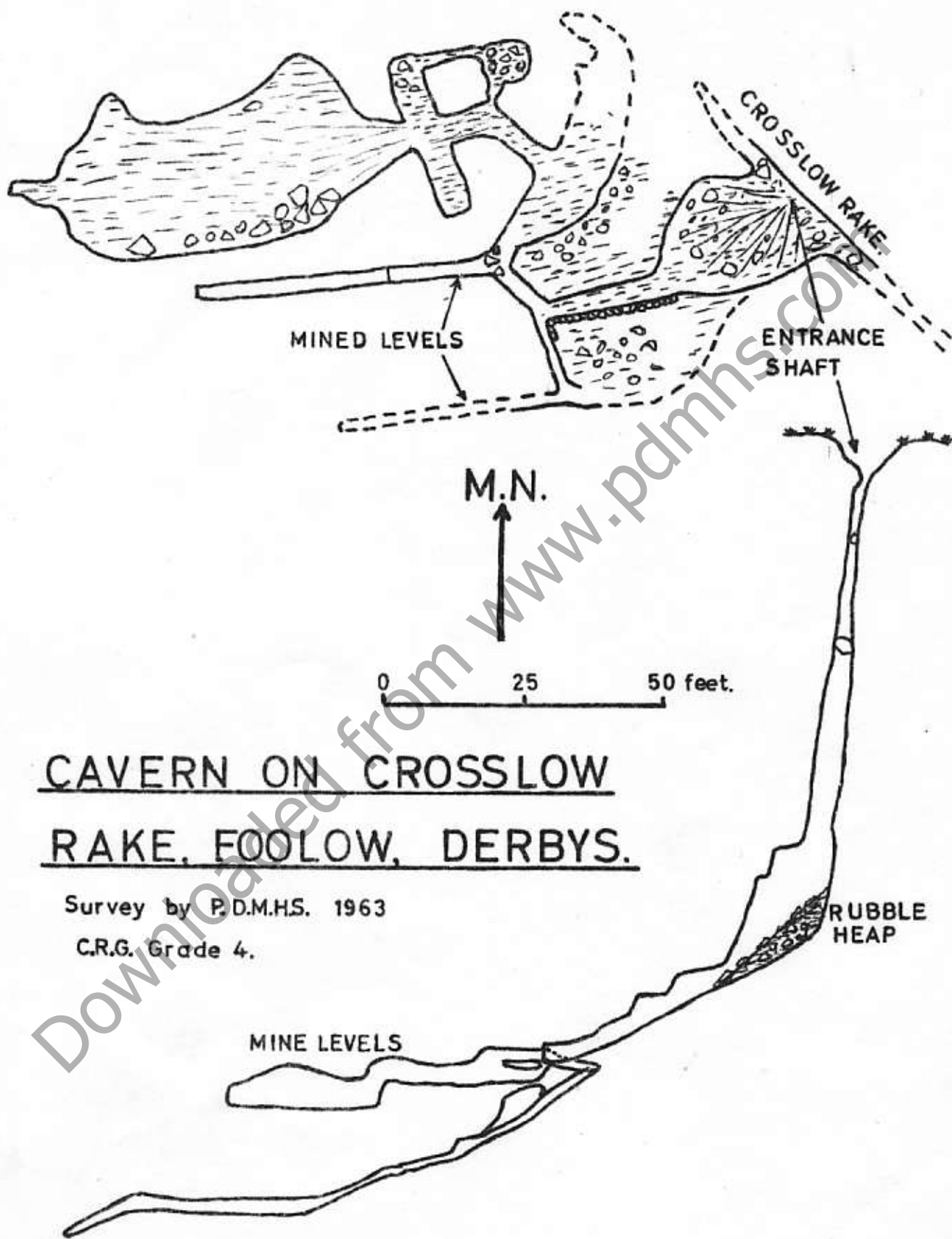
Acknowledgements are due to Mr. Broadbent for assistance with the initial discovery, Mr. M. E. Smith for information used to prepare this note and to those members of the Society who helped with the exploration and Survey.

References

- (1) FAREY, J. 1811. Agriculture and Minerals of Derbyshire, Vol. 1.
- (2) KING, B. 1962. Carlswark Cavern and the Cave System of the Foolow/Stoney Middleton Area. Cave Science, Vol. 4, No. 32, p. 377.



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Survey by P.D.M.H.S. 1963

C.R.G. Grade 4.

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