

MSG

JOURNAL

Foreword.

A few years ago, cavers in the Northern Pennines were rather depressed by the fact that access was being lost in an area where the number of caves of quality and length was relatively few.

Access to Fairy Holes in Weardale is still prevented while quarrying is removing the most scenic and interesting first few hundred yards. Trips in Hope Level Caverns have also been restricted although the cave system itself is preserved. The caverns at Silverband, never generally accessible, have finally been lost due to collapse of abandoned mine workings.

It was however realised that the known caves only represented a small proportion of the probable existing systems in the wide areas north of the traditional potholing district centred on Craven. Not even all the significant lines of underground water flow had been mapped out, and even at the present time there are still many valuable water tracing experiments just waiting to be carried out.

More recently things have begun to change, due in no small measure to the efforts of the M.S.G. Smeltmill Beck Cave shows just what can be done by a more careful examination of an area only superficially looked at by others. The forcing of the crawl at Ayleburn again shows that new exploration does not necessarily require weekends of digging. There is no doubt, however, that hard work at digs will yield spectacular results on some other systems, as at Priorsdale perhaps, but of course there is often an element of luck in the choice of the right dig as experience on Craven shows. Probably for a long time yet there will need to be a combination of work by digging and the careful scouting of surface areas of limestone which amount in the Northern Pennines to several hundred miles of outcrop.

I, for one, will look forward to reading of some of these discoveries in future numbers of this Journal.

Dr. J.O.Myers.

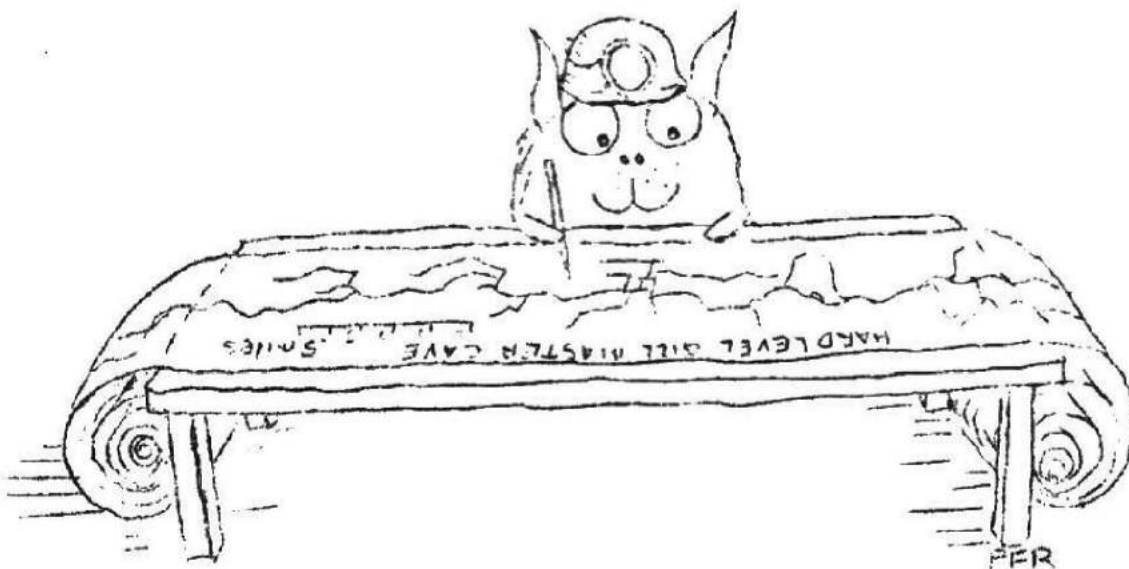
Editorial.

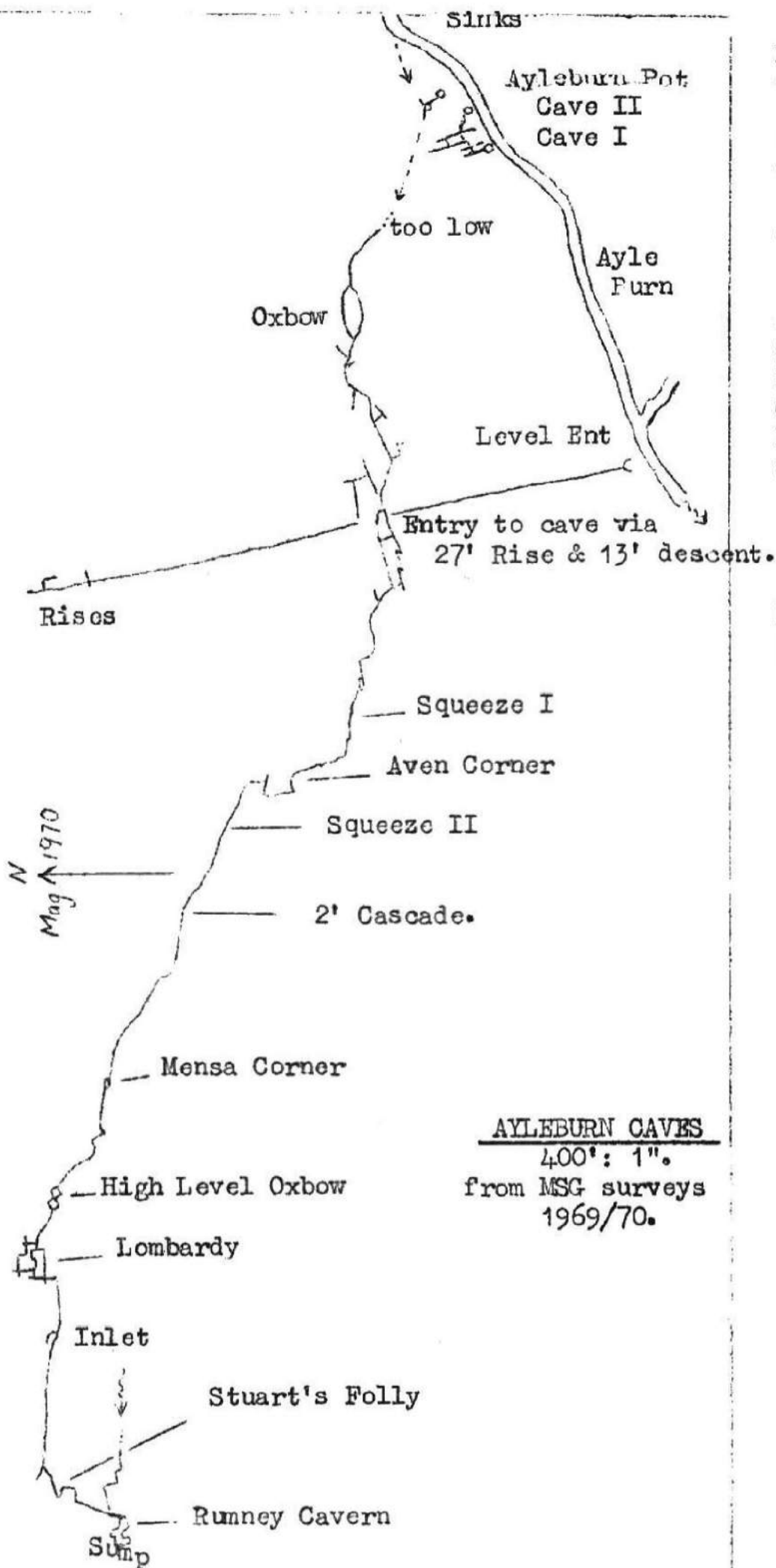
The production of this, the third Journal of the Moldywarps Speleological Group, has occupied some four months. The Journal covers the period of M.S.G. activities between November 1968 and February 1970. Our main discovery in this period has of course been the downstream extension of the Ayleburn Mine Cave, and there have also been a number of other minor finds. In this Journal these are all recorded, along with a number of surveys, the majority of caves which had never been mapped before. It had originally been intended to include a large unfolding survey of Ayleburn Caves in this Journal, but unfortunately the financial situation of the Group prevented this - dyeline copies, however, are available separately (see opposite).

Thanks are due to all those who contributed towards this publication. Dr J.O. Myers has kindly written us a Foreword. Other articles are by Stuart Hodgson, Pete Stephenson, and Martin (of the YURT) Davies. Martin and John Cooper, our Treasurer, have together borne the brunt of the duplicating. John Longstaff, our resident artist, has again contributed an unusual cover. Finally, but not least, thanks to Jan Arrowsmith for storing the piles of pages of the Journal as it was produced, and assisted in the final-great-stapling-together. The price is the same as last year, and we hope the standard is improving. Certainly, there are more surveys.

The M.S.G.'s endless search of the Northern Dales goes on as this Journal is produced. Already we have built up a selection of oddments, more surveys, and minor finds, for Journal 4, and we have hopes (as usual) that another major discovery may be just around the next bend...

Peter F Ryder,
Research Sec., M.S.G.





Dyeline copies of the Ayleburn Caves survey (showing all the caves and mine workings coupled with surface topography, and longitudinal and cross-sections, at 100':1") (3' by 1'6"), are available from S.D.Hodgson, Hon. Sec. M.S.G., "Greenlawns", Grammar School Lane, Northallerton, Yorks., for 4/- (inc. postage, sent folded).

Please make P.O.'s payable to S.D.Hodgson.

The Ayleburn Mine Cave.

The major MSG discovery within the period covered by this Journal has been the Extension of the Ayleburn Mine Cave, Alston, comprising almost 2800' of new passage. A description of the whole system, with its history, and notes on geology etc. is given below.

History of Exploration.

c. 1824 - Ayleburn Level driven by miners of the London Lead Co., and the natural cavern discovered. In 1833, Thomas Sopwith ('An account of the Mining Districts of Alston Moor, Weardale and Teesdale in Cumberland and Durham' pp. 64-7) published a description of the cave, which seems to have been quite well known as a local curiosity. One miner, named Rumney, was killed by a falling rock during work in the cave.

1948 - Brian Heys, with a C.U.C.C. party, re-discovered the cave, and explored downstream as far as the First Squeeze, and upstream to the 5' waterfall. A survey and description were later published in 'Cave Science'.

1952 - Durham Cave Club forced a way through the boulders above the 5' waterfall into the upstream passages, later surveyed by Hylton and Myers of N.P.C.

1969, Easter Monday, April 7th - An MSG party entered the cave, to examine the downstream end. After some work, a very tight dry tube - the First Squeeze - on the l. of the stream, here in a 4" bedding, was enlarged sufficiently to allow Colin Carson to get through, with some help from behind (and shredding his wet-suit in the process). He then explored downstream for 430', as far as the Second Squeeze.

Twelve days later, on 19th April, Leslie Beevers and Stuart Hodgson managed to pass the First Squeeze, and continued the exploration. The furthest point reached (Stuart's Folly) was over 2000' from the Squeeze.

It was the 19th of July before another trip could be made, and Colin and Stuart reached the end of the Extension. Further trips saw the entire cave surveyed, to the total length of 4,800' (as opposed to the 600' quoted in 'Pennine Underground').

History of Ayleburn Mine.

Although the mine seems to have operated throughout the greater part of the 19th century, it does not seem to have been of much importance. The main vein worked, Ayleburn Vein, carried zinc blende and witherite (barium carbonate) in the Tuft sandstone, but had been removed in the Great Limestone, usually the most important ore-bearing strata, by the development of the cave. A second vein was cut 600' further up the level, Clay Vein, but no records of this survive. The only record of production is of 122 tons of blende from Ayleburn Vein, in the period 1894-6.

The entrance to the level collapsed three or four years ago, and for a time the mine, and cave, were inaccessible. However, local miners, re-inspecting the workings, dug out the present entrance in 1968. This is at the moment in a rather unstable state, and on some visits we have found it blocked by loose debris, so visiting cavers would be well advised to carry a spade.

Description of the Cave.

In describing the cave, it is most convenient to divide it into three sections, the passages upstream of the Waterfall Chamber in the "Olds Cave", the "Old Cave" downstream from the Waterfall Chamber to the First Squeeze, and the MSG Extension downstream of the First Squeeze.

The Mine Workings.

The present entrance into Ayleburn Level is through a loose collapse hole covered over with tin sheets and rails, on the N. side of the track from Clarghyll Bridge into the disused quarries on the N. of Ayle Burn. This hole drops into the level beyond a roof fall, the original entrance. being a few yards further south, on the other side of the track.

550' from the present entrance, after wading through knee-deep water in a level 6-10' high, one comes to a fork in the passage, with above a rise leading up into the cave. The r. fork of the level is choked by collapse after c. 120'; the main passage continues for 720', with two further rises on its r. (east) side. A few yards beyond the fork a passage on the r. rises, at first steeply, to a 'T'-junction. To the l. is a short trial, to the r. one steps over a 20' drop into the branch level, to the base of a very high and apparently unsafe rise.

The Rise and Entry into the Cave System.

The rise above the 'Y'-junction is of 27', the first 12' (to an old stemple) overhanging, the remainder not quite vertical, but rather loose. Our usual technique is for the best climber in the party to ascend, using an old rail propped against the wall to overcome the initial 12', and lower a 25' ladder for the remainder of the party. Two solid beams wedged across the passage above the rise provide a belay.

At the top of the rise are two low passages. That straight ahead (natural?) runs for c. 30', coming out 15' up in the roof of the cave stream passage. The normal route into the cave is on the l., where a parallel rift (with on its l. another old mine trial) drops to the r., 13' into the cave - a fairly easy, but again rather loose, scramble. At the foot of the descent, the Waterfall Chamber is c. 50' upstream.

The Upstream Passages.

Above the 5' waterfall, a scramble through boulders - for about 50' - ends in an easy squeeze over a large slab, and a scramble over another rock, at a junction. On the r. is an attractive phreatic tube 3' wide, straight ahead the 6' high main upstream passage.

The tube (draughting inwards) runs for 25', turning l. and r. again, to a squeeze. Beyond this has not been surveyed, but Stuart crawled on with one end of the tape, and covered another 100' of winding narrow passage, before returning, with some difficulty. This 100' of passage had evidently not been entered before.

Continuing up the main passage, the stream is again met, sinking under the l. wall. 90' from the junction is a shot ox-bow on the r., 4' above the stream, with a second side passage running off from it. This bears r., a sandy bedding, and ends in a 'T'-junction with a higher but narrow passage. To the l. becomes very tight, to the r. has been followed for c. 20' to another junction - a slim cavern might proceed further. It seems very probable that this connects with the first side passage, mentioned above, and a 'through trip' may well be possible.

The main streamway continues, gradually lowering to c. 4' high, and becoming more winding, with after a 2' deep pool, a larger section 12' wide

and 6' high. This seems to have been developed along the line of a phreatic passage crossing the line of the streamway obliquely - the original passage continuing on both r. and l., but each way choked with sand after c. 25'.

The streamway swings r. again, 4' high and 5' wide, and continues through pools for 90' to a small chamber, where a dry ox-bow runs off on the r. This is 130' long, developing into a bedding 15' wide and 2' high, and with near its far end a small 5' high chamber, formed by a large fallen block. Beyond, one crawls down a sandy slope to rejoin the streamway, here a 2' high 10' wide crawl. The stream passage, roughly parallel to the ox-bow, is passable, but includes a long duck with only 2-3" airspace.

Where ox-bow and streamway rejoin there is another small chamber on the r., again formed by a fallen block. The stream passage continues, becoming wider and lower, and swinging gently r., with small stalactites at the sides. After 100' the passage is 20' wide, and 40' further on, the limit of our survey, it is 30' wide and rather less than 1' high, ahead lowering further. The floor is gravel, and digging might make a connection with Ayleburn Pot, if thought worthwhile.

The "Old Cave".

This is described proceeding downstream from the 5' waterfall: The Waterfall Chamber is c. 15' square, and 20' high, with a pool at the foot of the fall. The stream passage from here to the First Sump is known as Malachite Passage, from a vein of that mineral visible in the roof at the foot of the climb down from the mine workings.

Proceeding downstream from the chamber, passing a short ox-bow on the l., and an inlet (part of the main stream?) on the r., 50' of easy walking brings one to the base of the 13' climb from the rise. A few feet beyond, on the l., is an easy 10' climb into the Sump By-pass, and on the r., the streamway lowers to the First Sump.

The sump is by-passed by a high sandy-floored rift, turning r. after 84' to rejoin the stream. At the turn, 6' up, is the entrance of Upper Grotesque Passage. Where the stream is rejoined, one can crawl upstream to the other side of the Sump, which cannot be of any length. Downstream is a high passage, at first boulder strewn, then narrowing. On the l. is the entrance of Lower Grotesque Passage, just before a turn to the r.

The two Grotesque Passages are named from a profusion of peculiar projecting chert nodules they contain. The Upper Passage is c. 10' above the Lower, and the two connect via an impassable slit. The total length of the two Grotesque Passages is 187'.

Continuing downstream, the streamway is 12' high and 2' wide, passing a mined cross-rift on the r. (near here, and elsewhere in the "Old Cave", early C19 visitors, including Sopwith, have chalked their initials and names on the walls, and these interesting graffiti remain in surprisingly good condition). Beyond, the passage swings r., and lowers. At one point the stream flows into an impassable rift, and the way on is an 8' climb up into a 30' crawl (The Overhead Crawl). Returning upstream, it is easy to miss the upper level, and crawl up the lower rift, where there are dangerous loose rocks (Chris Langthorne of MSG encountered these, and was fortunate to escape with bruises and the loss of his lamp). Further downstream are a few easy squeezes through boulders, and then a wet crawl (with on the l. a tight ox-bow). The passage then lowers further, to a 4" bedding, with on its l. a tight dry tube. This runs for 30' to a small chamber, just large enough for two to sit in. This was the limit of the explored cave until Easter 1969.

The Downstream Extension.

There appear to be two possible routes on from the small "chamber" mentioned above. A roof bedding can be forced for 12', but becomes too low. The lower route is a 15' long tube, c. 9" high and 1'6" wide, with a bend half way. This should only be attempted by small cavers - and enlargement would be very difficult. Rescue from beyond this point would be virtually impossible.

Once through the squeeze, the stream is rejoined in a more roomy passage, following the dip of the limestone quite steeply, with the stream running over a smooth rock floor. There is a low 30' crawl over fallen blocks, then easier hands-and-knees work. Just before Aven Corner - a 7' Aven - the stream sinks under the l. wall, reappearing a few yards downstream. From here to the Second Squeeze is a shallow virtually static canal, partly crawling and partly stooping.

The Second Squeeze, much easier than the first, is formed by a large boulder in the middle of the passage. Beyond, the cave begins to slope downward again, with occasional rapids and small cascades. The passage is up to 20' wide but rarely more than 4'6" high, and often boulder strewn.

At about 850' from the First Squeeze, the passage begins to change character, and become a more usual vadose streamway, 4' wide and high enough to permit walking. The height increases to 20', and a double bend with some large fallen slabs, one resembling a table, giving the name 'Mensa Corner', is passed.

1390' from the First Squeeze is the High Level Ox-bow, 5' above the stream on the l., about 50' long, roomy and sand-floored (the streamway between the ends of the ox-bow is smaller than usual, evidence that the ox-bow was the original stream passage). Continuing downstream, three small side passages at varying heights above the stream are passed on the r. These lead into a complex series of small sandy crawls, obviously of phreatic origin, known as Lombardy, with a total length of c. 180'.

Downstream of Lombardy, the high rift-like streamway continues past another narrow ox-bow on the r., and large fallen blocks. After passing a short side passage on the r., the streamway suddenly changes character from the rift to an 8' wide 3' high wet crawl. A sharp double bend with a deep static pool at first sight appears as a sump - and was thought to be by the first explorer, hence the name Stuart's Folly. This is 2100' into the Extension.

Up to this point the general trend of the cave has been north-west and then west. Beyond Stuart's Folly the passage opens up again to 9' high, and runs in a straight line south-west. On the l. one passes the entrance of the only passable inlet in the system. This passage (its stream presumably derived from one or several of the small surface sinks at the rear of the limestone outcrop) is a narrow vadose rift, becoming tighter. The furthest point reached is 130' from the main streamway. The passage ahead draughts, but is very tight.

25' downstream of the inlet, the stream drops over a 4' waterfall into the largest chamber in the system, Rumney Cavern. This is 50' long, 20' wide and up to 20' high. The floor is strewn with fallen blocks and on the l. is a wide ledge, at the rear of which is a small impenetrable inlet.

At the end of Rumney Cavern the stream flows through a few feet of low crawl into another chamber, with a 20' aven partially choked with boulders, and into the Final Sump, which appears to be probably too tight to dive. This point is c. 2380' from the First Squeeze from which the Extension was entered. The total passage length of the Extension is c. 2750'.

Ayleburn Caves and Pot.

These small holes, obviously previously explored by several parties, must be included in this description, as they constitute a part of the same system as the Mine Cave, although without passable connections.

Ayleburn Caves 1 and 2 are found by following the track past the entrance to the level, into a disused quarry. A few yards beyond the far end of the quarry, on the north bank of the Burn, is the entrance of Cave I. Cave II is at the same level a little further along the bank. A few yards further upstream, the Burn is crossed by a fence. By following this up the steep bank on the l., and then turning r. along the valley side where the fence turns l., a large rocky shakehole is found within a few yards - in this is the entrance to Ayleburn Pot.

Ayleburn Cave 1 is c.120' long, with two small chambers, the remainder crawling. At the end, a few feet before the passage becomes too tight, on the r., is a tube blocked with rather fine formations (partially smashed by vandals - these are virtually the only formations of note in the whole Ayleburn system), which connects with Ayleburn Cave II.

Cave II is 160' long. From the entrance, one scrambles down to a circular fluted 30' aven, which appears to have developed independantly from the rest of the cave - a point of interest for cave geomorphologists. At the far side of the aven an 8' climb up leads into the main passage of the cave, over 10' high and 6' wide, its size suggesting that at one time this was the main streamway of the system. This turns l., and is soon choked, but on the r. is a narrow rift, with a false floor dividing it into two passages, which communicates with the formation-blocked tube from Cave I, and then becomes too tight, although a draught suggests that this must communicate with the Mine Cave streamway, probably upstream of the limit of exploration.

Ayleburn Pot consists of a clamber down into a descending rift (with a strong in-draught), ending in a 'T'-junction with the streamway, c.200' upstream of the surveyed end of the Mine Cave. The streamway here is too low to follow in either direction, but a few feet back up the rift, a small crawl on the l. (looking in) leads into the streamway a few yards further downstream. This is here just large enough to enter, and has been forced downstream for about 20', before becoming too low. The length of the Pot is c.70', and the depth c.35'.

The Survey of the Ayleburn Caves.

The surface and underground surveys required 5 trips for their completion (see Meets Reports). The MSG Extension was surveyed to Grade 5C (revealing a total drop of c.62' between the First Squeeze and the Final Sump - the drop between the Entry from the Mine Level, and the First Squeeze has been estimated at 9'). The remainder of the Mine Cave, and Ayleburn Caves I and II, was surveyed to 4C (except the Entry into the cave), since the only clinometer we had was an Abney Level, which proved very difficult to operate underground). Other apparatus used was a 'Sunto' compass (far more efficient than the prismatic compasses still used by some unenlightened cave surveyors), and a Fibron tape, the data being recorded in waterproof note-pads made of sheets of white 'Fablon' stuck back-to-back. The surface survey and survey of Ayleburn Pot is to Grade 5C. The various sections of the survey were initially drawn out at scales of 20, 40 and 50':1", then all reduced to a master drawing at 100':1". This has meant considerable loss of small detail, but a larger scale (50':1" would have been ideal) would have rendered printing costs too high, and the survey sheet of unmanageable length.

Hard Level Gill Cave.

Hard Level Gill Cave was first visited by the MSG on 26-11-66, and ten subsequent trips have been made, resulting in the cave being extended by several hundred feet, and surveyed.

About quarter of a mile upstream of the Old Gang Smeltmill, Hard Level Gill flows over the Undersett Limestone at Hard Level Gill Force. At the foot of the 15' fall, on the east side of the small gorge, is the entrance of Hard Level Gill Cave, an opening 3' high by 2' wide, 4' above stream level. Below the entrance, part of the Gill sinks into a small fissure - at times this can take the whole stream.

Description of the Cave - Entrance to Crypt Junction.

The entrance passage ends after 15' in a narrow chimney, dropping 10'. At the foot of this the water from the sink enters the cave. The way on is through a squeeze into a small chamber, where the stream disappears on the l. into a small rift, becoming too tight after a few feet. To the r., one crawls up into a larger chamber, 4' high, with daylight visible from a half choked rift in the side of the gorge, a few feet south of the entrance.

A slide down a mud slope opens into another chamber, or large passage, c.6' high and 12' wide, but somewhat obstructed with fallen blocks. To the r. the chamber runs back towards the bank of the Gill, ending in a 7' aven. A low bedding passage, too small to enter, continues, apparently under the bed of the Gill.

At the east end of the chamber are two passages, that on the r., taking a small stream, that on the l. at a higher level, and quite large, although almost choked with boulders. After c.50' the two passages rejoin at Crypt Junction, a 3' high chamber with a sandy floor and an arched roof (see cross-section) formed by a phreatic tube running N-S across the line of the main passages.

North Passage.

To the south, the phreatic tube runs for a few feet to a small aven inlet. To the north (l.) it continues to form North Passage. This is mostly a flat crawl, with a sand and gravel floor. Two 4' deep holes in the floor connect by an impassably tight passage at a lower level.

15' beyond the second hole in the floor (and 40' from Crypt Junction) is a squeeze, where a sand bank was dug away on 20-1-68 by Messrs. Longstaff and Ryder. The passage beyond - January Passage - is a winding flat crawl with no room to turn round. At the dug squeeze, a stream is audible, apparently only a few feet away, but is not seen. About 60' beyond the squeeze, a very tight corner marks the limit of exploration. Up to this point wall scalloping suggests that the passage was once an inlet, but here its direction reverses. A very small caver might just manage to pass this corner, but others must return by crawling slowly and awkwardly backwards. The writer of this article has been once stuck for half an hour attempting to reverse through the dug squeeze.

Crypt Junction to the entrance of February Series.

From Crypt Junction, two passages continue eastwards, the 'tube' or streamway, 3' below floor level of the chamber, and Channel Passage, roughly parallel, 6' higher in level, and a few yards further north. Channel Passage descends a rock slope into a crawl along an attractive passage with a channel of clear water between rock shelves, rejoining the streamway, 50' beyond Crypt Junction. Where the passages join is a chamber 6' high. Beyond, the 'streamway' (usually dry) continues eastward for a few more yards before

closing down. In the final few feet of passage are two low holes on the r. The way on is through the first of these, the second being choked.

February Series.

The first hole opens, after a few feet of 9" high crawl, into a bedding plane roughly parallel with the main passage. To the l., (downstream) this swings r., and narrows to a flat crawl through pools, ending where a leaf of rock divides the passage horizontally into two.

The very tight 'letter-box' above the leaf of rock was first passed - we assume - on 25-2-67, by Steve Peart, of MSG, the wet squeeze beneath being dug out later. Beyond the squeeze, one emerges into a passage running r. and l. The r. passage is very tight.

To the l. (downstream) the stream passage continues, mostly hands-and-knees crawling, for over 150'. Near the end is a short section where one can stand upright, and there is one side passage, a tube half-filled with sand, and too small to enter, on the l. This section of the cave ends in a 'T'-junction, after a flat sandy crawl.

To the l. (east) one crawls up a rift into a small chamber, formed by a large fallen block. A small continuing passage is hopelessly blocked by a fallen slab.

To the r. at the 'T'-junction are a few yards of very narrow jagged crawl to a fallen block, obstructing access to the passage beyond, which is apparently the downstream continuation of the main streamway.

General Notes.

Hard Level Gill Cave is unusual in a number of respects. It is one of the few accessible caves entered from a sink in the Northern Dales, and it is one of the few caves in the Undersett Limestone - another is Hope Level Mine Cave (in the Four Fathom Lmst. - the name applied to the Undersett north of Stainmore).

The length of the Cave quoted in 'P.U.' is 150'. From the MSG Survey, which is to CRG Grade 5C-D, except February Series, which is 4C, the length is in excess of 650', and the depth around 30'.

Although in normal conditions little water flows through the cave (the main flow from the sink at the entrance sinks into Hard Level Mine, appearing in the roof of the level through an impassably low bedding), flood debris in the roof is evidence of the occasional flooding, and in very wet weather, or if there is a threat of storms, Hard Level Gill Cave is not a safe place to be.

Old Gang Cave.

The entrance to this cave - at the base of a small outcrop of the Undersett Limestone a few yards east of the entrance of Hard Level - was dug out on 30th Nov. 1968. The entrance (draughting) had been choked with rocks and earth, and one large slab, apparently once part of the cave roof, showed well-developed anastomosis channels.

The cave is only 30' long, mostly a flat muddy crawl, ending choked by loose rocks. A continuing passage is visible, but conditions are too cramped for digging.

Further Work.

MSG work at Hard Level Gill is far from complete, and we have hopes that future publications will report further progress. The area still presents many problems - the relation of Old Gang Cave to the main cave, the source of the two streams encountered in Spence Level, whether Hard Level Gill Cave II, on the opposite side of the Gill to the main cave (not described here - at the moment only c.30' long) is part of the main system etc.

HARD LEVEL GILL CAVE, Swaledale

NGR NY 968007. Alt 1375'.

Length 700'. Depth c 38'.

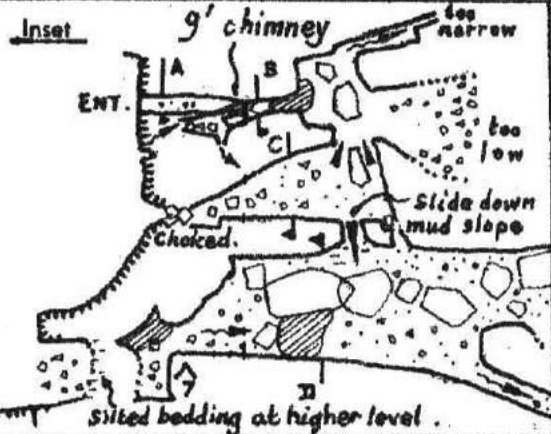
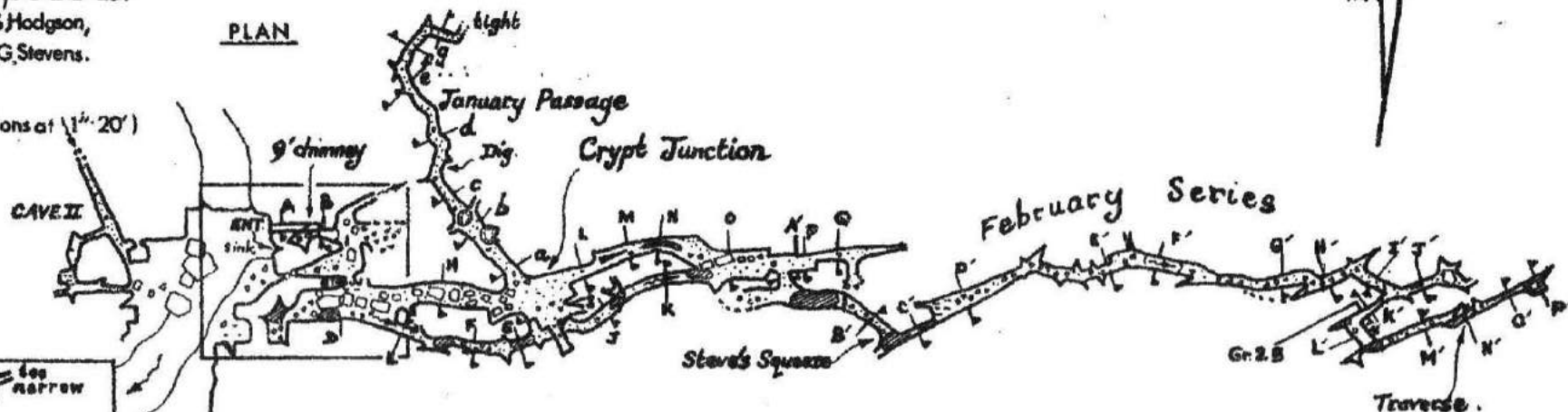
MSG Survey CRG Gr 4/5 C and 2B.

1968-70; G.M. Davies, S. Hodgson,

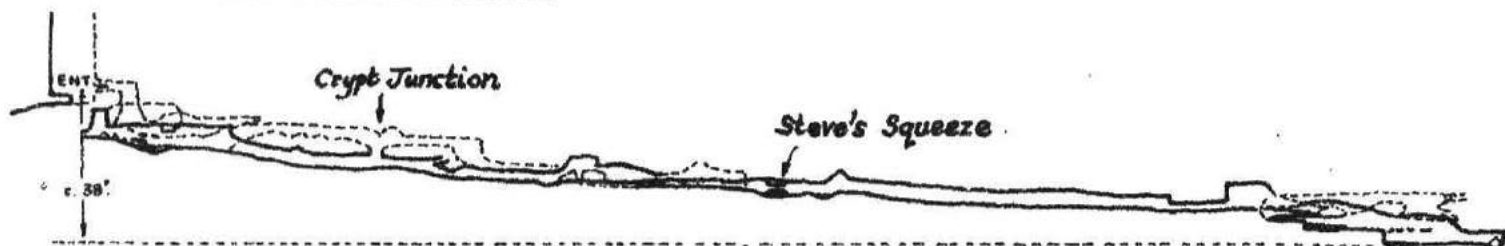
J.C. Longstaff, P.F. Ryder, G. Stevens.

Scale, 1" = 50'.

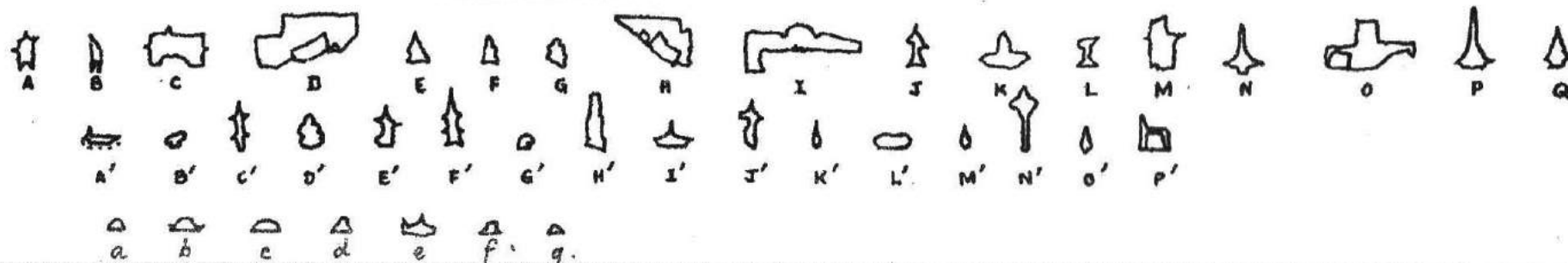
(Inset and cross-sections at 1" = 20')



SECTION, Projected on 81°



CROSS SECTIONS



Smaller Finds.

Apart from the work at Ayleburn, and Hard Level Gill, in the last year or so MSG members have found a variety of small caves, some of considerable interest. With the lack of documentation of Northern Dales caves, it is difficult to ascertain whether we were the first club to enter these holes - in some were traces of previous explorers, but they have apparently never been 'published' previously.

Swaledale - Blind Gill Hole. NY 935.019.

This cave is situated in the Main Limestone, on the east side of the ravine of the northern tributary of Blind Gill, a feeder of Gunnerside Gill. The cave entrance is very obvious, a few feet above the stream, and drops into a large rift passage. To the l. the passage narrows, and ends c.30' from the entrance. To the r. is a 13' climbable pitch into a rift, choked at the bottom.

On the opposite side of the main rift, behind a large boulder, the entrance rift continues, as a narrow steeply descending passage. This was choked, and dug out on 26-12-68, by an MSG party. This rift ends in a 6' drop into a second large rift, parallel to the first, and running for 30' back towards the side of the Gill, where daylight enters from a small hole in the roof (entry here would require 30' of ladder).

The length of the cave is 92', the depth 36'.

Friarfold Hush Cave. NY 943.014.

The entrance of this cave was found, and dug out, by Alan ('Gel') Holmes of MSG in June 1969, who noted it to be draughting strongly. The cave was explored and surveyed on 26-7-69, proving to consist of a single passage, varying in width from 2-5', and generally 3-5' high, with two 15' avens, and a few feet beyond the second, a 10' hole in the floor, ending in a tiny fissure which seems to be the source of the draught. The main passage ends suddenly, 75' from the entrance.

Two large pieces of wood found in the cave suggest that miners had been in, although the entrance was virtually completely choked when first found by us.

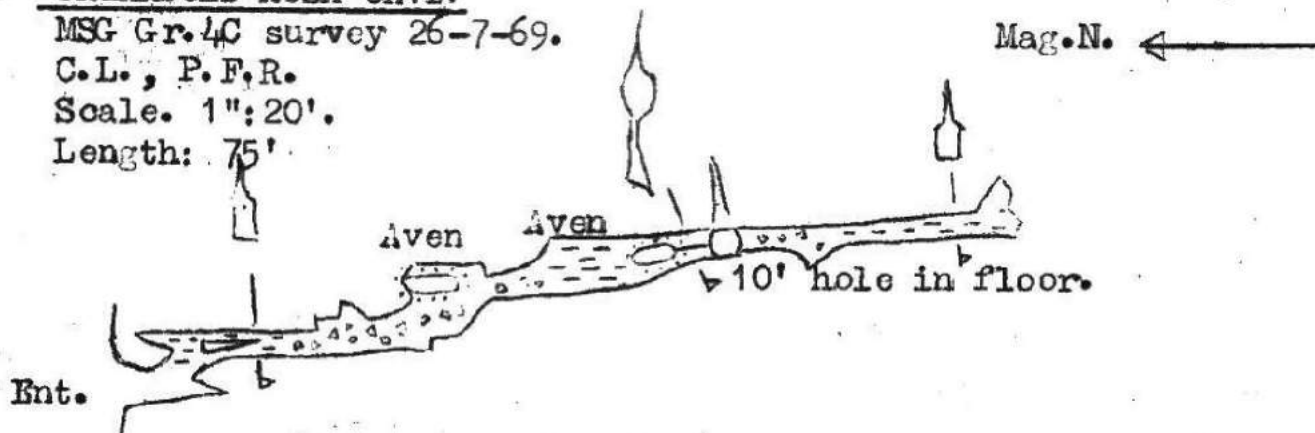
FRIARFOLD HUSH CAVE.

MSG Gr.4C survey 26-7-69.

C.L., P.F.R.

Scale. 1":20'.

Length: 75'



East Gill Cave I, Keld. NY 897.020.

This system was only slightly extended by MSG, but as no previous survey or description have been published, it is included here.

The cave is situated on the west bank of East Gill, at the foot of a low cliff, about a mile above the confluence of East Gill and the Swale.

The entrance is only a few inches above stream level - in flood the

Gill can flow into it - and is divided into two by a rock shelf, which one can either crawl under or over.

The entrance passage is a crawl, descending gradually for c.60' to a 6' drop, and a few feet beyond opening into the side of a roomy stream passage, here 6' wide and 10' high. Upstream, passing three small passages on the r., which all join in a low but wide bedding (which also connects with the entrance passage), and a small inlet on the l., the passage ends choked after 80', with a small hole in the roof opening into an impassable bedding through which daylight can be seen from the bank of the Gill.

Downstream of the entrance passage, the streamway seems to end abruptly in a blank wall, with on both l. and r. narrow rifts opening into the bases of avens, that on the l. c.35' high, with an inlet passage at the top, visible, but not enterable without scaling tackle.

The stream flows into a low slit under the wall beneath the l. aven, into a flat wet crawl. This is only a few yards long, and opens into a 4' high chamber. On the l., past a mud bank, is a short passage with three avens, each 12-15' high. Downstream the stream flows on down a very small passage, with a rather larger dry ox-bow on the l., which rejoins the streamway. At the end of this the MSG party dug through a gravel bank into another short section of stream passage, ending with a 4' high cross-rift on the r., and the stream flowing into a 6" bedding on the l.

The total length of passage surveyed in the cave is 360' ('P.U.', apparently referring to the same cave, gives 225'). The stream in the cave is presumably a subterranean part of the main Gill, though neither sink nor rising are obvious. The system is definitely unsafe in wet weather, as the Gill can rise rapidly and flood the cave.

East Gill Cave II is some distance further upstream, higher above the stream (also on the west bank) at the foot of a cliff. This is a muddy cross-rift system, perhaps 250-300' long.

Arkengarthdale - Punchard Gills.

The area of Great and Little Punchard Gills, to the south of Arkengarthdale, has been the venue of some seven MSG meets in 1969. (See "Meets Reports"). The two streams join some distance above a bridge on the Arkengarthdale to Tan Hill road. A few hundred yards south (upstream) of their confluence, both Gills are crossed by a track (negotiable by cars) running south-west from the main road near Whaw to some old coal pits high on the fells.

Half a mile upstream of the ford by which the track crosses Little Punchard Gill is an impressive gorge in the Main Limestone. The outcrop of the limestone in Great Punchard, at a lower level (due to both dip and faulting), is restricted to a few small exposures in the Gill banks, and a disused quarry by the bridge where the track crosses Great Punchard Gill. Beside this quarry is the partly walled entrance of Routh Level, accessible for something like half a mile.

The main fact of speleological interest is that Little Punchard Gill at times sinks completely in its bed, and probably reappears at a spring near the bridge in Great Punchard (see map) half a mile away and 200' lower. Further upstream in Great Punchard is what is apparently a fossil sink, possibly once feeding the same rising. On the east flank of Little Punchard valley are some small sinks, all of which resurge locally. Further down the valley, beside the ford, is a large rising (impenetrable) from a thin band of limestone, the source of which is problematical.

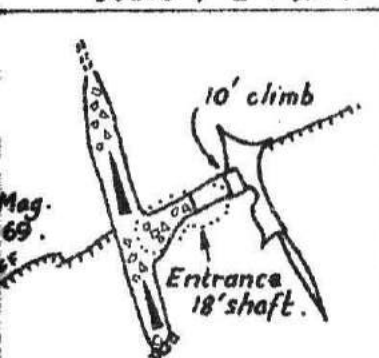
SILVER BIRCH POT

LITTLE PUNCHARD GILL

N.G.R. NY 959.035; Length 90'; Depth 45'.

Survey Gr. 4 B.

Scale; 1": 20'.



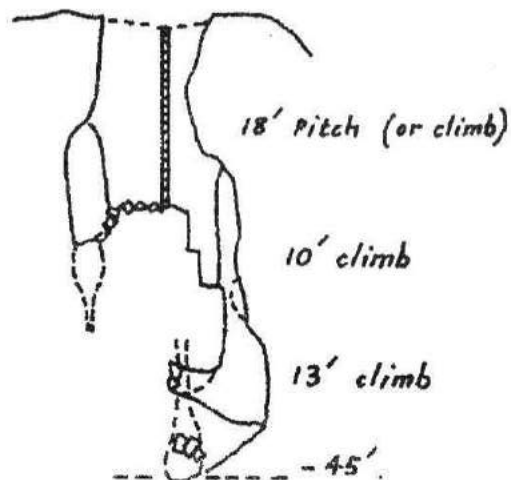
PLAN; at surface, to -28' level

PLAN; at -40°.

Foot of 13' climb



SECTION; Projected on 236°



DAMOCLES HOLE

LITTLE WINDEGG SCAR

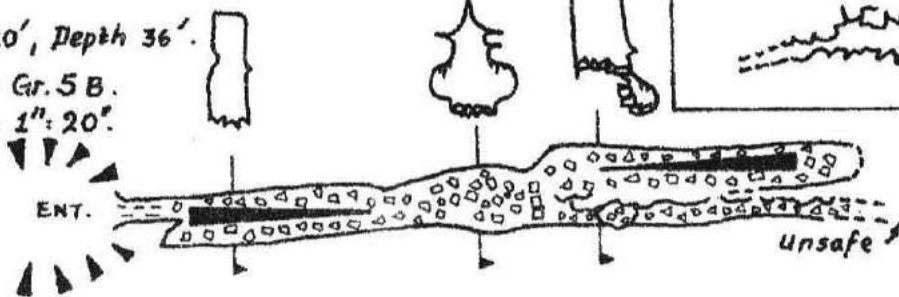
N.G.R. NZ 010.048:

Length; 120', Depth 36'.

Survey Gr. 5 B.

Scale; 1": 20'.

N. Mag. 5-69°.



ENT.

Loose

SECTION; Projected on 162°.

BLIND GILL

HOLE

GUNNERSIDE GILL

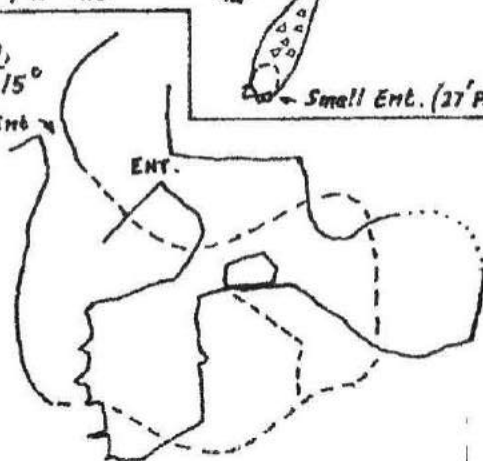
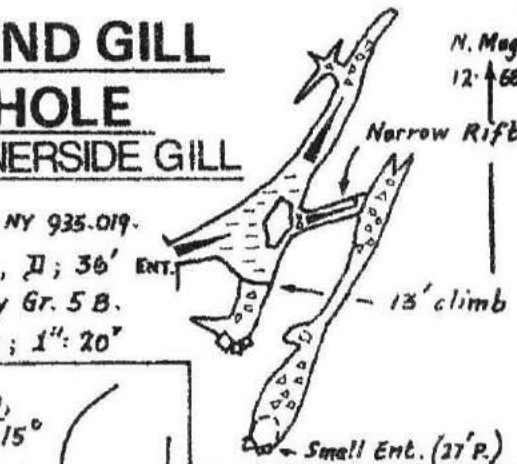
N.G.R. NY 935.019.

L; 92', D; 36' ENT.

Survey Gr. 5 B.

Scale; 1": 20'

SECTION, Proj. on 15° Small Ent.



HORROCKS

CROSS

CAVE

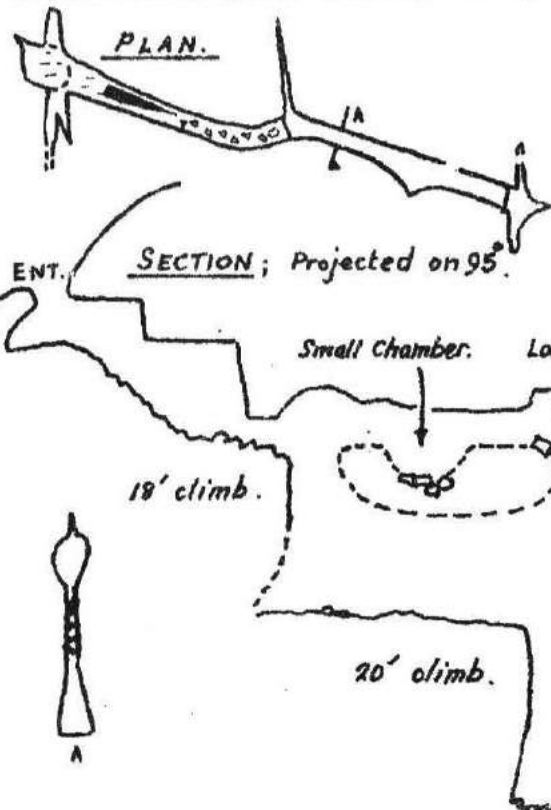
WINDEGG SCAR

N.G.R. NZ 009.041.

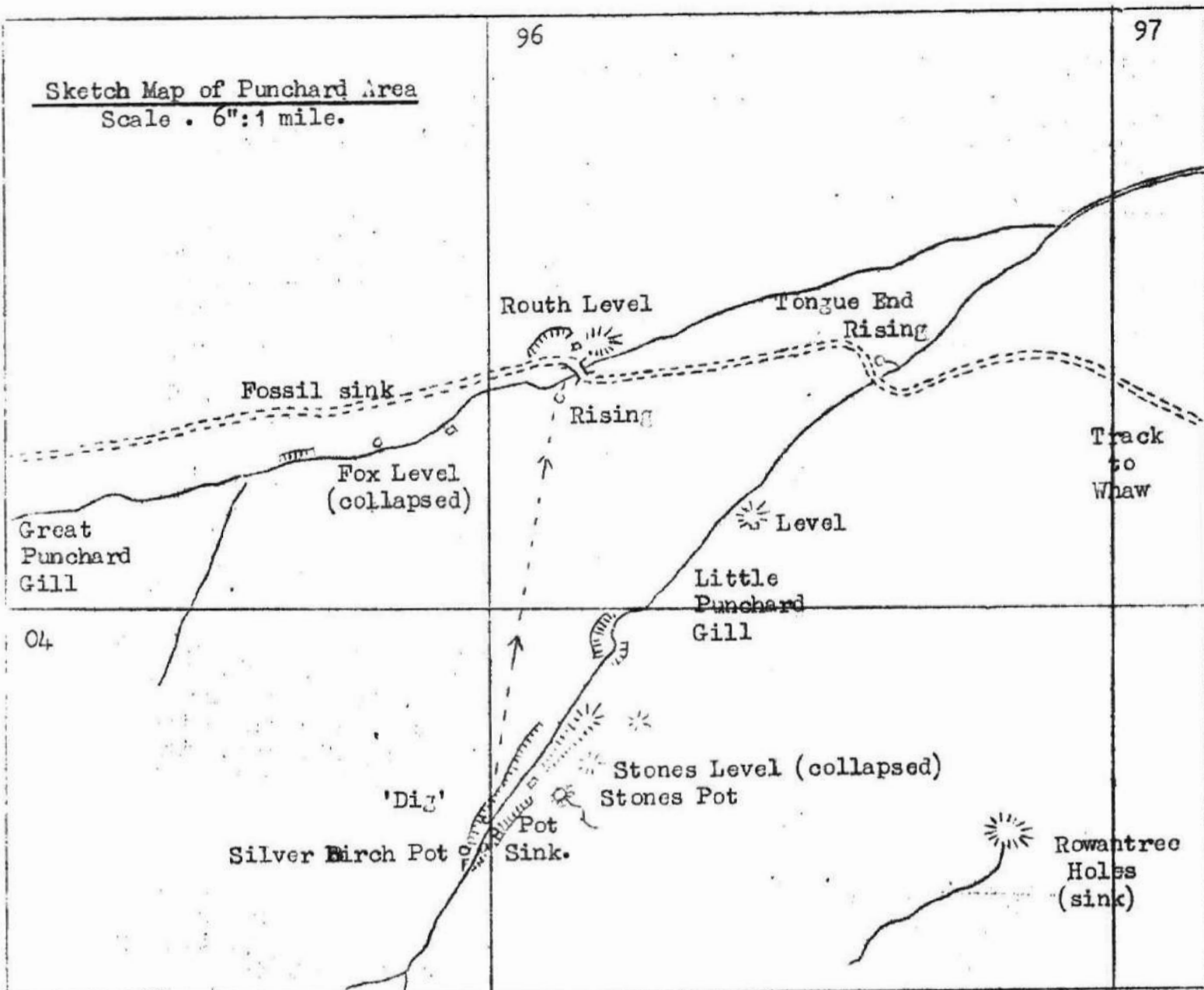
Length; 50', Depth c. 50'

Survey Gr. 3 B.

Scale: 1": 20'



Sketch Map of Punchard Area
Scale . 6":1 mile.



MSG activities have been concentrated on the gorge in Little Punchard. The main 'dig', a rift beside the stream, proved to close to a 3" fissure 10' down, but three open pots have been explored, the first two probably connected with the main hydrological system. Also in the gorge, on the west side, is a small cave, about 20' long. This closes to an impassable rift, which seems to widen further in. One can climb 20' into the roof, but this closes.

Silver Birch Pot. NY. 959.035.

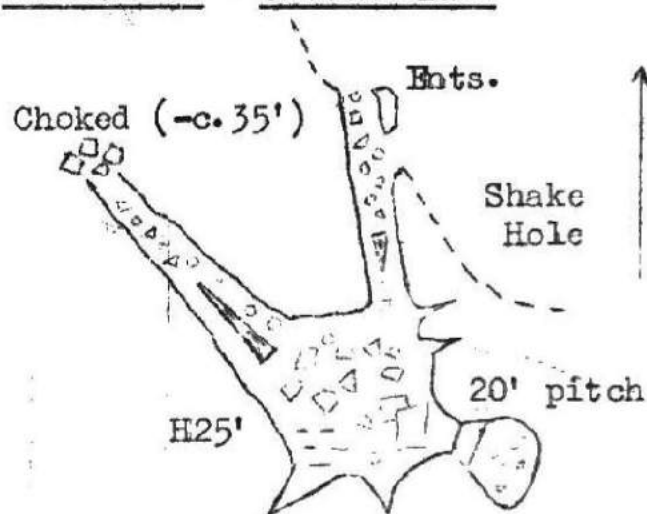
Unusually situated c.30' above the stream in the west bank, at the top of the limestone, and directly below an overhanging scar of shale from which grows a silver birch tree. The survey of the pot makes a description unnecessary. All three "pitches" can be free-climbed, but a rope or ladder is a help. Pushing this hole, by blasting or digging, at the moment seems the best prospect in the Gill.

Pot II (as yet un-named) NY 960.035.

A few yards downstream of Silver Birch Pot, on the opposite side of the Gill, a cave entrance is visible 15' above stream level. A precarious ascent over mud and vegetation leads into a 12' crawl, and a squeeze onto a 30' climbable pitch, choked at the bottom, but again a possible 'dig! Stones Pot. NY 961.037.

This is situated high on the east side of the ravine, above the collapsed Stones Level, at the mouth of the limestone gorge. The entrance is in a prominent shake, in which a small stream sinks, and reappears from tiny fissures about 50' lower down the hillside, the horizontal distance between sink and rising being only a few yards.

Stones Pot - Sketch Plan.



The Pot has two entrances, close together, dropping into a rift passage which within a few feet enters a surprisingly large chamber, c. 20' square and 25' high. On the r., a large rift drops steeply to perhaps 35' below entrance level, before narrowing and becoming choked. On the l., a small hole opens onto a 20' ladder-pitch, with an aven above, from which the stream enters, making the climb rather wet. The shaft narrows towards the bottom, where the water disappears into tiny fissures, with no possible way on. The total length

of the Pot is perhaps 80', and depth 35'.

Damocles Hole. NZ 010.048.

This cave is situated in the limestone plateau above Little Windegg Scar, about half a mile to the east of the Stang Pass road. There are several shallow shakeholes on the rather marshy plateau, none exposing any solid rock. In the south end of one, a small and dripping hole in a grass slope drops down into a roomy rift with a descending floor of very loose rocks. At the base of the slope one enters a fine passage, evidently a major phreatic tunnel.

Unfortunately, after only a few feet, there has been a second collapse, this time not reaching the surface. A slope of poised boulders - too dangerous to climb - leads into a second rift chamber with a huge block (from which the name of the hole is derived) hanging from the roof, apparently defying gravity. On the r. side of the slope a crawl continues, the r. wall and roof part of the scalloped side of the phreatic tunnel, the floor and l. wall loose rocks. After 10' is a 12' deep hole in the floor, all in loose boulders, and 15' further on unsafe rocks block the passage. Beneath the entrance slope is another short crawl, even more unsafe.

From carved initials it is obvious we are not the first party to have found this cave. A Grade 5C survey showed the length to be 120' and the depth 36'. The fine passage so briefly seen suggests that a very extensive fossil cave system must underlie the area, and is comparable with that of which a few sections are seen in Sod Hole Gill Caves, Fossdale. Attempts to 'push' Damocles Hole could well prove suicidal, and unfortunately there seem to be no other holes in the area, and no sinks or risings of any size in the limestone here.

Horrocks Cross Cave. NZ 009.041.

This cave is situated in an unusual position just on the brink of Windegg Scar, a mile or so south of Damocles Hole. The O.S. 6" map gives the name 'Horrocks Cross' on the fell just above this part of the Scar.

The cave is c.50' long and perhaps 40 or 50' deep, with two climbable descents of c.20', and is developed along a rift, with no evidence of vadose action. The rift can be followed at two levels, the lower route with the two climbs, or a traverse in the roof ending in loose boulders above the foot of the second descent. The joint on which Horrocks Cross Cave is developed is prominent in the face of Windegg Scar, with an obvious cave entrance on it (becoming too tight immediately), and, at its foot, beneath the cliff and at the top of the scree slope below the Scar, a peculiar pothole (Horrocks Cross Pot), climbable for c.15' to where it closes to an extremely narrow fissure.

Gretadale - Lower Mellwaters Hole. NY 963.127.

A very small hole near the south bank of the River Greta half a mile downstream of God's Bridge, near where the River sinks a second time, had been noted by MSG members on a number of occasions.

On the 7th June 1969, Colin Carson and PFR, after a trip down God's Bridge River Cave, visited this hole again, and noted that a small stream could be heard down it. Excavation started, and the PFR geological hammer was accidentally dropped down the hole, which gave added incentive for the continuation of work, until the enlarged hole was just big enough for Colin to squeeze down. This he did, down 12', into a small streamway. Downstream, after 10', the passage ended in a hopeless choke (the water rises at the side of the dry bed of the Greta a few yards away, and promptly sinks again). Upstream, the passage, at first 5' wide and 3' high, ran for c.30' before suddenly closing to a 6" bedding. This stream is probably that from the West Mellwaters sink (NY 960.124), its underground course probably being indicated by a small dry valley, and a line of shakes.

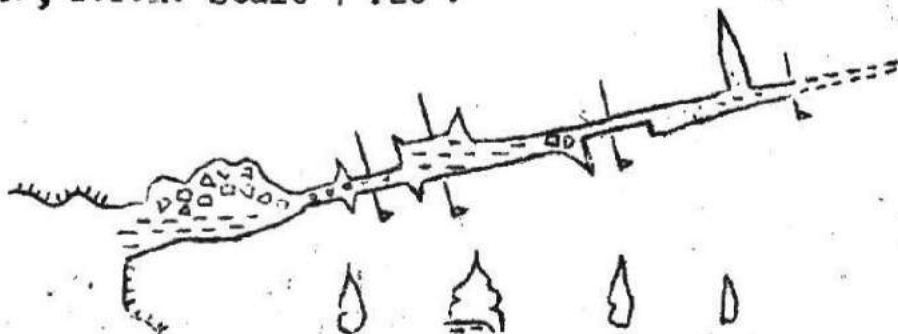
Weardale - Jacob's Well Cave. See elsewhere.

Alston Area - Rabbitskull Cave, Little Gill. NY 778.392.

Rabbitskull Cave.

Survey Grade 3C 20-9-69

C.C., P.F.R. Scale 1":20'.



This cave is situated at the foot of a limestone scar on the east side of the Little Gill valley, just before the stream swings l. through the limestone gorge. The entrance is c.4' square, but hidden at times behind

giant and ferocious nettles. The entrance chamber had been visited by previous MSG parties, but on 20-9-69 it was decided to pay this little cave - evidently a fossil resurgence - more attention, in the hope that it might formerly have been fed by Little Gill sinks, now feeding Priorsdale Rising, and might just possibly provide a route into that system.

Beyond the entrance chamber, the cave closes to a tight tube, passed after the removal of a few rocks. Beyond it widens again, then closes to a very tight sideways squeeze. There is a thick layer of mud on the floor here, in which dripping water has eroded small basins, revealing a layer of rabbit bones, including one well preserved skull - hence the name - beneath. The squeeze is about 6' long, into slightly easier crawling, for a few yards, to where it closes to become absolutely impassable. Fortunately at this point, on the l., is a 7' high aven, providing a place to turn round, from where to struggle back to daylight. The length of the cave is about 65'. It was thought that there is in fact no connection with the Little Gill - Priorsdale system, the former sink probably being on the fell above the scar.

West Stainmore Area - Smeltmill Beck Cave. NY 849.146.

On a visit to Smeltmill Beck Cave on November 1st, 1969, Colin and Phil. Robinson, along with an N.U.C.C. guest, found two extensions. Shrimp Inlet was 'pushed', all tight crawling with no room to turn round, for 120', and the l. hand passage of Handwrecker Series (marked 'sump' on the survey - which it is in wet weather) pushed for over 100', to a fairly definite end, this involving a short genuine sump, free-dived by Colin, waist deep mud and ducks. A future MSG publication will carry reports on this and other new work in Smeltmill. The total length of the cave (found by MSG in 1967) is now over 6,200', making it the longest accessible natural cave north of Craven.

The Longest Caves in the Northern Dales - A List.

Fairy Hole, Eastgate in Weardale (now inaccessible and partly destroyed by quarrying) - former length was 12,000'+
Silverband Mine Caverns, Great Dun Fell (now inaccessible through collapse of mine workings). Length 6,000'+
Smeltmill Beck Cave, Stainmore. Length 6,200'+
Ayleburn Mine Cave, Alston. Length c.4,800' (including Ayleburn Caves, total length of system almost exactly 1 mile)
Thackthwaite Beck Cave, Askrigg. Length 2,500'+
Hope Level Mine Cave, Stanhope. Length c.2,400'.
West Scrafton Pot, Coverdale. Length c.2,000' (Depth 145').
God's Bridge River Cave, Bowes. Length c.1,850', including nearby caves which are part of the same system, c.2,200'.
Borrowdale Beck Head, Stainmore. Unsurveyed, length perhaps 2,000' (?)
Whirley Gill Hole, Askrigg. Length 1,700'.

Various mine caverns, now inaccessible, would also possibly figure on this list - Flushiemere, Barras End, Lunehead, etc.

MEETS REPORTS. November 1968 to February 1970.

(This list is not complete, some meets, mostly on Craven, being omitted).

2-11-68. Coverdale. S.Hodgson, C.Langthorne, P.F.Ryder.

Excessively wet conditions prevented any trip underground.

4-11-68. Askridge Area. S.H., P.F.R.

A long walk to inspect the sink - in silt, and impenetrable - of Whity Gill, which feeds the Oxnop Rising. One open pot was found on the way, closing down after 20'.

16-11-68. Hard Level Gill. J.C.Longstaff, P.F.R.

Barras End Level was explored for c.2300', as far as a very unsafe collapse, over which a strong draught blew. The survey of HLG Cave was then commenced.

30-11-68. Hard Level Gill. J.C.L., P.F.R., G.M. and R.Davies (Y.U.R.T.)

Old Gang Cave was opened and explored, and the survey of HLG Cave continued. Brandybottle Incline was also inspected.

7-12-68. Gunnerside Gill. J.C.L., P.F.R.

Several levels and Botcher Gill Sink were inspected.

14-12-68. Jacob's Well Cave, Frosterley. C.L., P.F.R.

21-12-68. Jacob's Well Cave. S.H., A.Holmes, P.F.R.

Most of the cave was surveyed to Grade 4. For description see elsewhere.

23-12-68. Upper Fossdale. S.H., P.F.R.

Various small holes were found, the largest, Round Hill Pot (SD.863.953) a climbable descent into rift chambers, c.60' long.

24-12-68. Gunnerside Gill. C.Carson, S.H., P.Robinson, P.F.R.

Blind Gill Hole (see 'New Explorations') was explored and surveyed, and a descent of Ewelcap Scar Pot essayed - 30' and 20' pitches, very loose rocks.

26-12-68. Hope Level Mine Cave. C.C., J.Cooper, S.H., C.L., J.C.L., P.R., P.F.R.

The low crawl near the final sump was forced, but ended after a few feet in a hopeless choke and a stagnant pool.

1-1-69. Stockdale. C.C., S.H., P.F.R.

Many shakeholes were inspected, and a very wet 10' long cave found in Grainy Gill. One interesting rising in Stockdale is choked 15' by loose rocks.

11-1-69. Fagnergill. S.H., P.F.R., G.M.Davies (Y.U.R.T.)

A small cave passage was found 200' into the Main Horse Level (NY990.071) and Sloat Hole Level, an extensive and intricate system, visited.

14-1-69. Hope Level Mine Cave. S.H., P.F.R.

An attempt to push the 'dry' downstream end of the cave, amidst loose boulders and foul mud, failed.

26-1-69. Punchard Gills, Arkengarthdale. J.C.L., P.F.R.

A 15' cave was dug out in Great Punchard, and various features of interest in Little Punchard inspected.

1-2-69. Little Punchard. J.K.Arrowsmith, L.Beevers, A.H., A.Knight, P.F.R.

The pitch in Stones Pot (see 'New Explorations') was descended. Foul weather.

8-3-69. Little Punchard. J.K.A., L.B., A.H., J.C.L.

Again bad weather (3' snow) prevented any significant work.

15-3-69. Easegill Caverns. J.D.Atkings, L.B., J.K., P.F.R., C.C.

A joint meet with R.U.C.C. An enjoyable trip. Later, some of the party became involved with a rescue from Meregill Hole, and spent a night on Ingleborough in a raging blizzard.

5-4-69. East Gill Caves. C.C., J.C., S.H., P.F.R.

East Gill Cave was extended a little (for description see elsewhere) and surveyed to CRG Grade 4C. East Gill Cave II, a muddy cross-rift system entirely different in character from the first cave, and a few hundred yards further north, was also explored.

7-4-69. Ayleburn Mine Cavo. J.K.A., C.C., C.L., P.F.R., J.Wedderburn. The breakthrough into the downstream extension was made.

8-4-69. Arkengarthdale. S.H., P.R., P.F.R.

Silver Birch Pot, in Little Punchard, discovered. Later, the cave in the Horse Level in Faggersgill was pushed a further few feet to a total choke, c.30' from the level.

17-4-69. North Stainmore and Faggersgill. L.B., S.H., C.L., P.F.R.

A small pot at the rear of the 1mst. plateau a few hundred yards south-east of Smeltmill Beck Cave proved to be choked a few feet down. In Faggersgill, a 'dig' at a rising was commenced.

19-4-69. Ayleburn. L.B., J.C., C.L., S.H., P.F.R., L.Worth.

Stuart Hodgson and Les Beavers explored the major part of the Extension. Meanwhile, the surface survey, and that of Ayleburn Cave 1, was commenced.

26-4-69. Hard Level Gill. S.H., P.F.R.

Hard Level Gill Cave ii found, Old Gang Cave surveyed, Brandybottle visited.

29-4-69. Little Punchard. S.H., P.F.R.

The 'dig' in L.P.Gill proved to close to a 3" fissure.

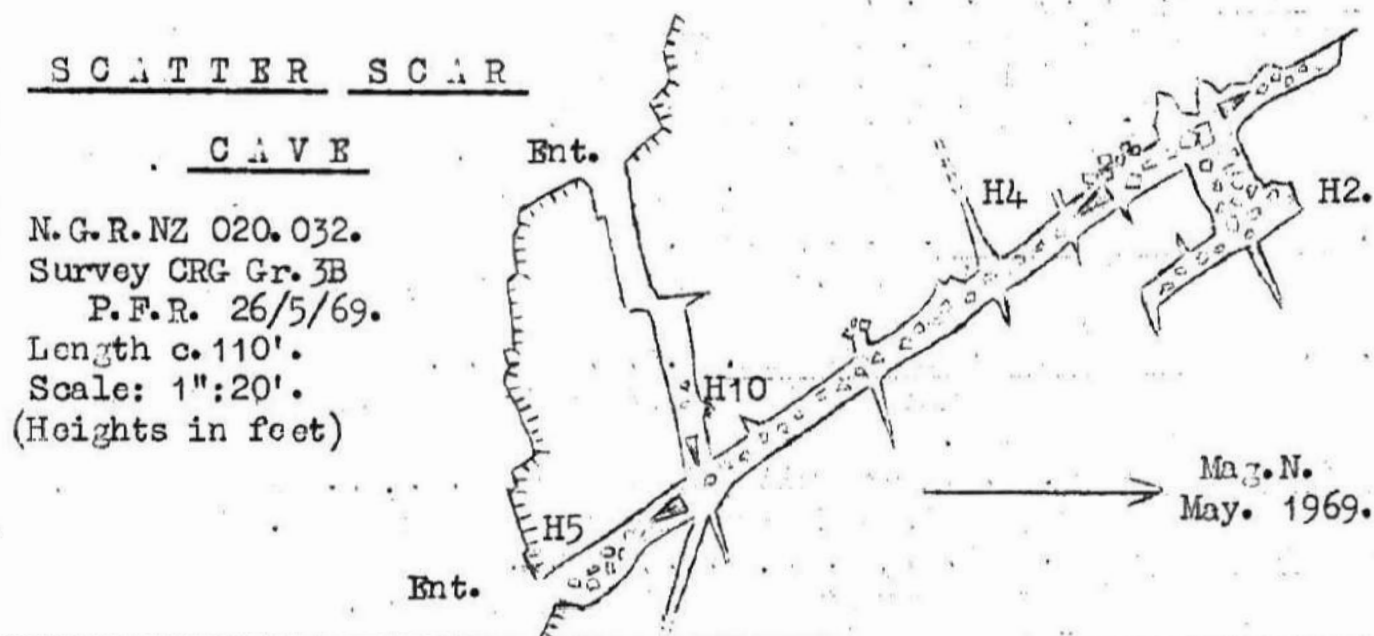
3-5-69. Jacob's Well Cave. J.C.L., P.F.R.

The survey was completed - total length just over 1,000'.

17-5-69. Upper Hudeshope. J.C.L., P.F.R.

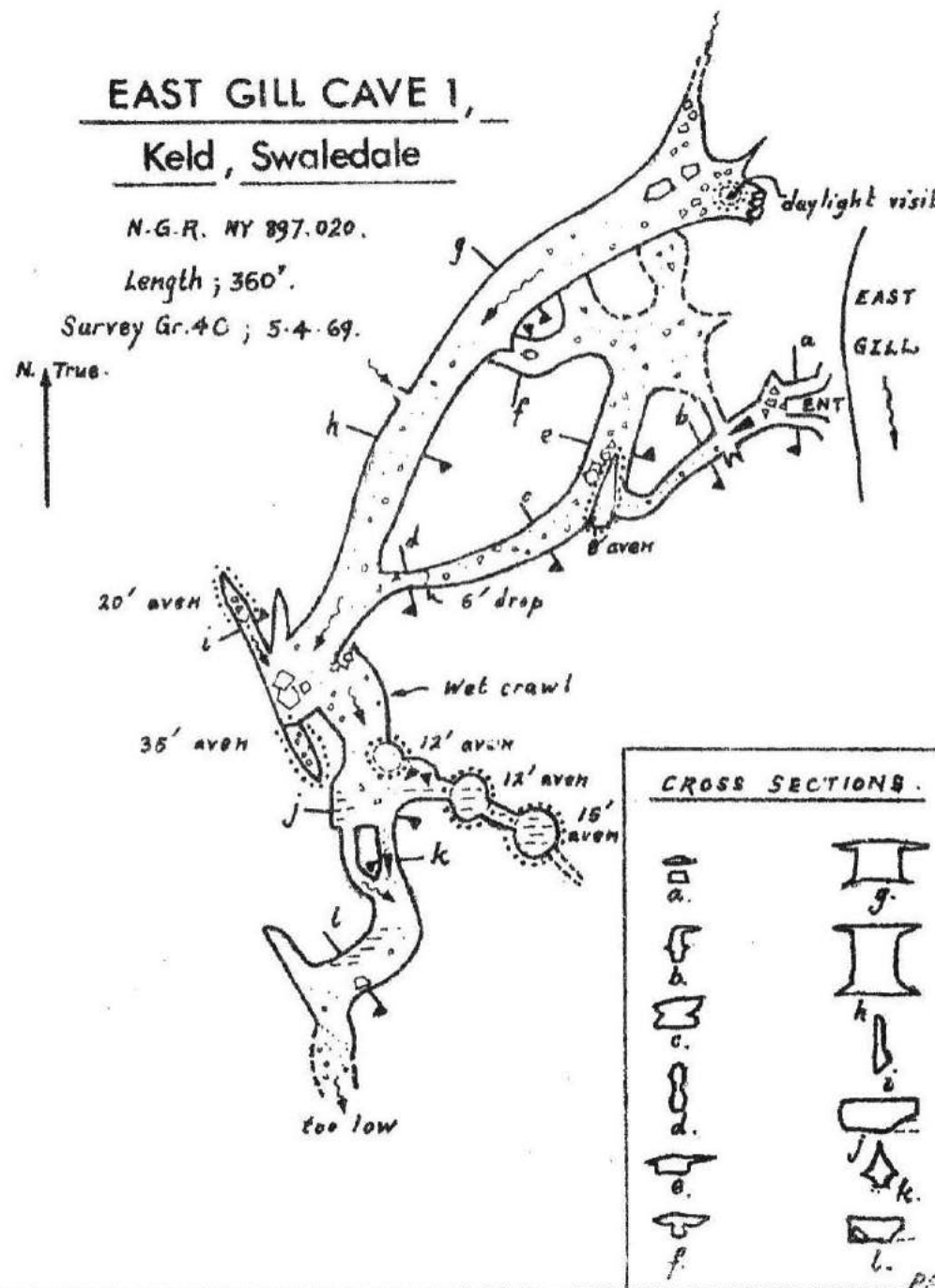
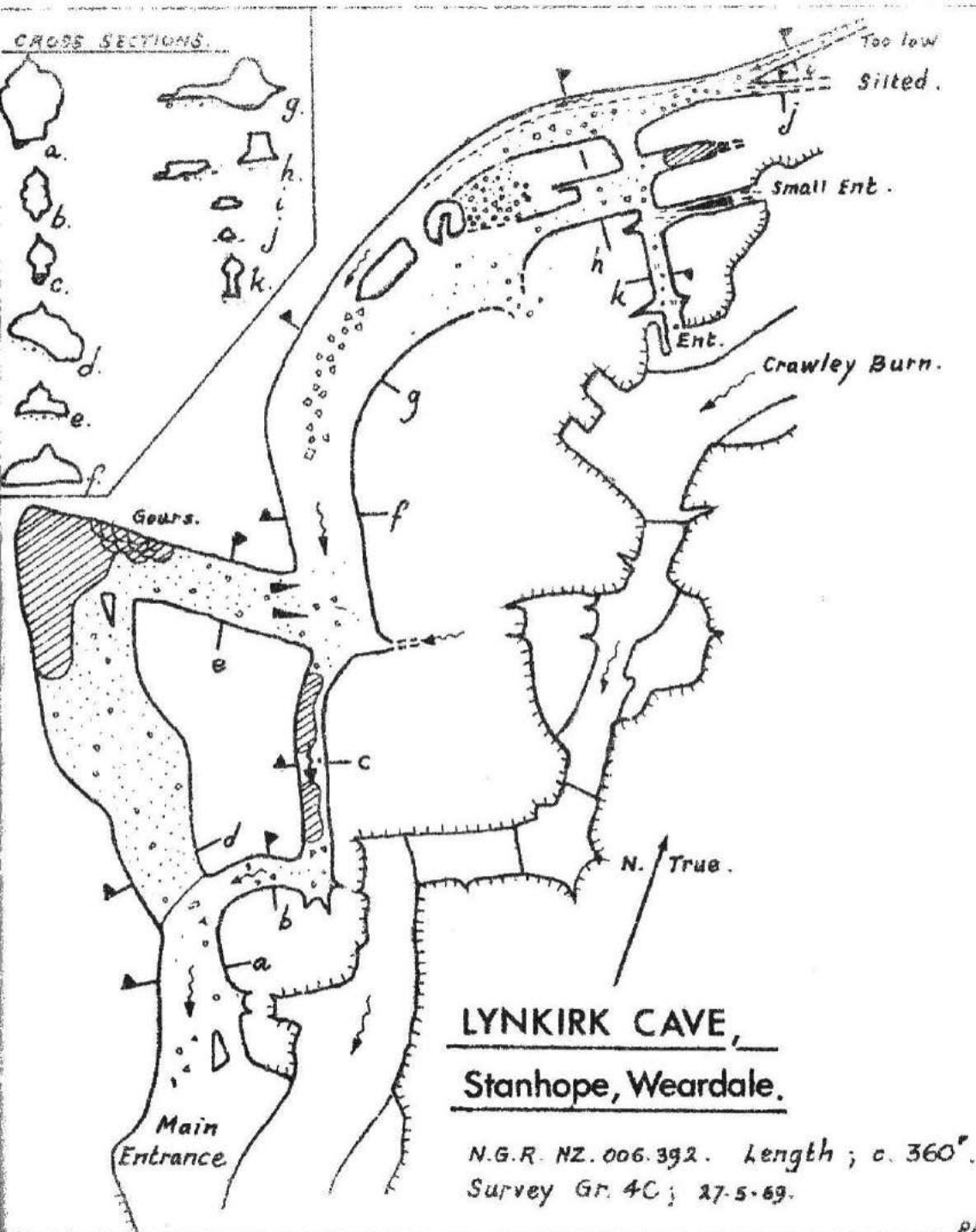
26-5-69. Slei Gill, Arkengarthdale. J.K.A., S.H., J.C.L., P.F.R.

Two small caves were 'found', both apparently developed on the same master-joint, on opposite sides of the valley. Both are dry rift caves. Scatter Scar Cave is 110' long, and North Gutter Hush Cave, enlarged by mining, and with some colourful flowstone, 85'.



27-5-69. Weardale. L.B., J.Hopwood, P.F.R.

Harnisha Burn Sink was inspected - the Burn falls into an open pot, 25' deep, dropping to a tight rift (and populated by adders). Lynnkirk Cave, Stanhope, was visited and surveyed to Grade 4C (total length 360', 'P.U.' gives 460'). There seem no prospects of further extension.



P.F.B.
 Scale 25' : 1"

29-5-69. Amagarthdale. C.L., P.F.R.
 Duncrobes Hole and Herroch's Cross Caves were explored and surveyed (see elsewhere). The Haggongill Dig was continued.

5-6-69. Richmond Copper Mine. L.H., J.H., J.C.L., P.F.R.
 Included one interesting moment when the floor of one of the upper levels collapsed beneath L.H. The survey was continued.

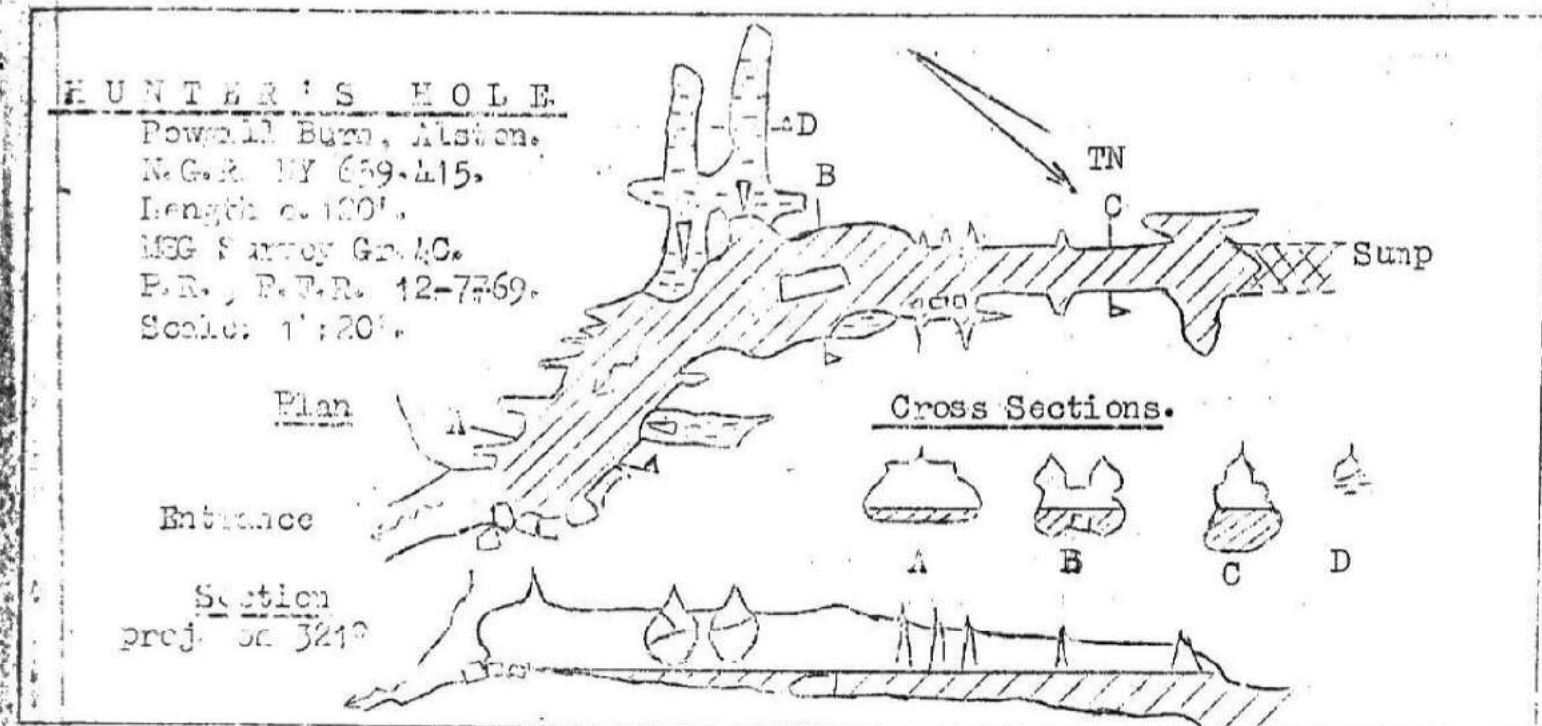
7-6-69. God's Bridge Area. C.C., P.F.R.
 The survey of the cave B. of the main system was continued, and the upstream sum in the River Cave inspected. Lower Mellwaters Hole (see 'New Explorations') was dug out and explored.

12-6-69. God's Bridge Area. L.B., J.H., P.F.R.
 Survey work continued, and the downstream sum of the River Cave was visited, the water level being very low.

24-6-69. Upper Brindale. J.C.L., P.F.R.
 Coal Hill Sike For (NY 818.191) proved to be a 30' ladder pitch, with no continuation.

5-7-69. Wensleydale. J.C., C.L., J.C.L., P.F.R.
 Various small holes in the Green Scar area (W. of Semerwater) were looked at. The longest (SD. 905.877) proved to be a c. 80' rift cave ending in a boulder choke. Son Hole Gill Caves, on the E. flank of Fossdale, were then visited, and proved most interesting.

12-7-69. Alston Area. C.C., J.C.L., P.R., P.F.R.
 The remote Tutman's Hole (NY 679.459) - an attractive stream cave, c. 1,000' long - was visited, and Y.U.R.T. surveyors met within. Later, Hunter's Hole, a very little known resurgence cave (like Tutman's, in the Scar Limestone), half a mile south of the Hartside Height road, was surveyed. The cave, fed by the sink of the Bowgill Burn half a mile to the west, ends in an inviting roomy sump.



19-7-69. Ayeburn Mine Cave. L.B., C.C., J.C., S.H., P.F.R.
 The exploration of the Extension was completed, and the survey of the Mine Cave commenced (the streamway surveyed from the First Squeeze to the entry from the Mine Level).

26-7-69. Gunnerside and Hard Level Gills. S.H., C.L., P.F.R.

The first meet based on newly acquired Winterings Farm. Friarfold Hush Cave (dug out a month or so previously by A.H.) was explored and surveyed, and survey work in Hard Level Gill Cave continued.

2-8-69. Ayleburn Mine Cave. C.C., S.H., J.C.L., P.R.

The survey was continued.

6-8-69. Jacob's Well Cave. C.C., J.C., N. Embleton, C.L., P.R., P.F.R., P. Stephenson (B.A.C.C.) Both extremities of the cave - Flood Rising Series and the streamway - were 'pushed' for some distance beyond the limits of the survey (which had already been printed, so no amendment could be made). It is uncertain whether we were the first to explore these passages (for description see elsewhere).

10-8-69. Dry Burn, Garrigill. C.C., S.H., C.L., P.R., and guest.

Various small caves in Dry Burn, c. 1 mile west of Garrigill, were explored, but none connected with the subterranean course of the stream. The longest, a 'through trip', is of c. 100'. An old mine, on the east bank of the Burn, with a 30' pitch, was also explored. All these holes are in the Scar Lmst.

16-8-69. Great Sleddale. S.H., P.F.R.

The "Swallow Holes" marked on the O.S. 2 $\frac{1}{2}$ " map on the east side of Wavery Gill (SD 842.986) proved to be merely bouldery shakes. More interesting holes were found in and above Long Scar, on the south side of Great Sleddale Beck. Some of these have been previously been entered by N.P.C. (N.P.C. Journal Summer 1967). The main sink, above the scar (SD 827.988), has a very impressive 45' deep open pot.

30-8-69. Ayleburn and Garrigill. A. & D. Brook, H. Crabtree (U.L.S.A.), C.C., S.H., P.R., P.F.R. The survey of the Ayleburn Mine Cave Extension was completed. Tynebottom Level at Garrigill was visited, and large nail-head spar crystals found.

6-9-69. Great Sleddale. C.C., J.H., C.L., P.F.R.

Further work in the Long Scar area (as yet uncomplete). The main sink, Great Sleddale Pot, was surveyed to Gr. 50. Below the open pot a scramble down through boulders leads to an underground ladder pitch of c. 20', and a streamway descending for a few yards to a depth of 82', before becoming too tight. Long Scar East Cave was pushed to 65', also becoming too narrow.

6-9-69. Sir Francis Level, Gunnerside Gill. A.H., P. Stephenson (B.A.C.C.) About a mile of wading, up to chest deep, leads to the impressive engine room. Photographs were taken.

8-9-69. Whirley Gill Hole. C.C., P.R., P.F.R.

The first MSG visit to this unusual cave. The ent. pitch is of 30', in a circular fluted shaft, followed by three 10' drops in a descending rift (60' ladder will just suffice). Below is another 6' drop into the stream passage, a long wet crawl. Described in the 'U.L.S.A. Explorations Journal'.

10-9-69. West Stonesdale. C.C., S.H., P.F.R., J.W.

A surface walk - a few small holes found.

11-9-69. Gunnerside Gill. C.C., P.F.R.

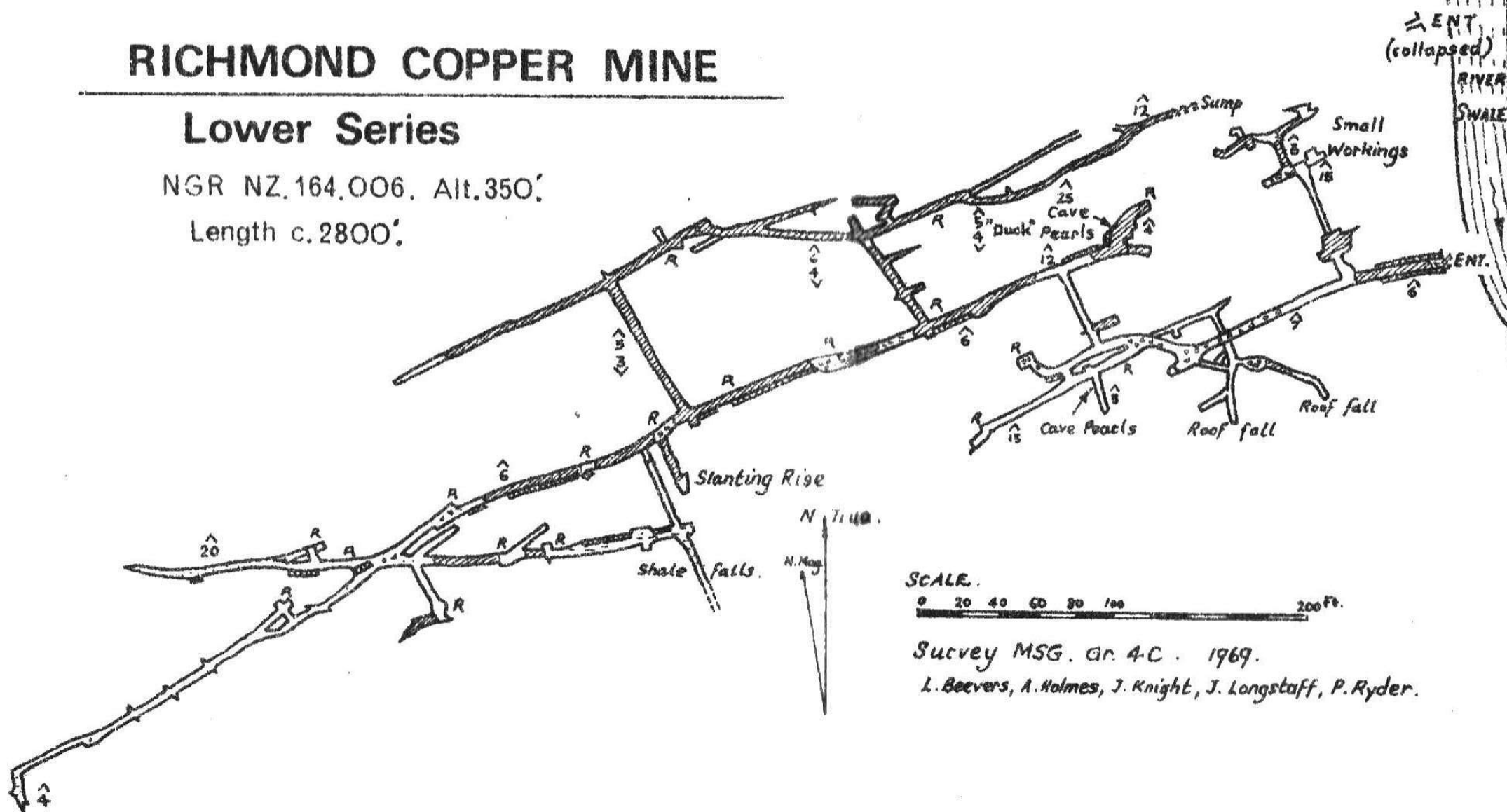
Another walk, a few features of interest noted around Eweleap Scar.

12-9-69. Little Punchard. C.C., P.F.R.

A third pot was discovered in Little Punchard Gorge, and descended by C.C. Silver Birch Pot was re-examined, to assess prospects of further extension. With some work it might be possible to break into further passages, and if the streamway which presumably exists between L.P. Gorge and the rising by the bridge in Great Punchard can be reached, the effort necessitated would be amply repared.

Lower Series

Length c. 2800'.



SCALE.

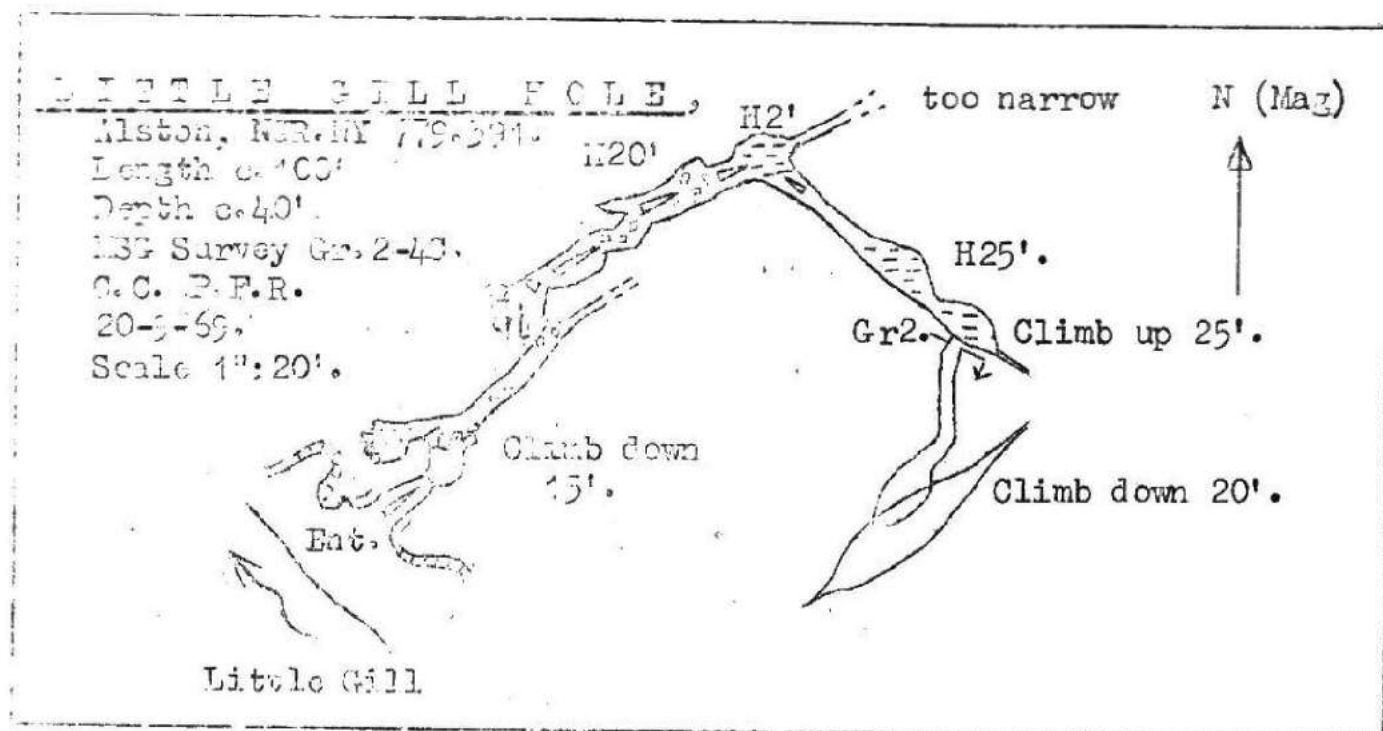
0 20 40 60 80 100 200 Ft

Survey MSG. Gr. 4C. 1969.

L. Beavers, A. Holmes, J. Knight, J. Longstaff, P. Ryder.

20-9-69. Little Gill Hole, Alston.

Rabbit Skull Cave (see 'New Explorations') was extended, and Little Gill Pot again inspected and surveyed. A section of this 100' long hole previously unknown to us was found by C.C. - an awkward (especially in return) 20' climb up at the far end of the cave leads into a narrow crawl for a few yards to a 20' climbable descent to a rift chamber, closing down at both ends to impassable rifts.



27-9-69. Wellhope Burn J.A., J.M.A., J.C., P.F.R.

It had been hoped to find another sink for Priorsdale Rising, but none was apparent. Instead, a sizeable (impon.) rising was noted (NY 813.409), which might well be fed by Sally Grain Sink, previously presumed to feed Priorsdale. One little cave was found, in the south bank of the Burn at NY.815.410, in the Four Fathom Limestone. This is apparently a subterranean ox-bow of the Burn, and is c. 30' long, all crawl - Wellhope Fold Cave.

1-10-69. Hard Level Gull J.A., J.C., P.F.R.

Speck Level was surveyed (c. 720'), and a variety of interesting features noted.

13-10-69. Weardale S.H., E.P.R., P. Stephenson (B.A.C.C.)

The sinks for Fairy Hole, in Strawberry Burn (NY 927.344) were inspected. There are two holes, a dry shaft too tight c. 10' down, and the main sink in the stream bed, closing after 25' to a 4" fissure. Further north, on the east flank of Westernhopeburn, are a line of large shakes, the Killie Holes, leading into Fairy Hole. In one of these, at approx. NY 934.359., is a hole, named 'Killie Hole Pot' - a precarious squeeze through poised boulders down into a descending rift, choked about 30' down. Heights Quarry Cave (NY 923.369), previously noted by P.F.R., proved to be choked and too narrow c. 25' in. Nearby, Heights Quarry had cut an old level, which can be followed for c. 60', with a high rise.

1-11-69. Crackpot Cave. N.E., P.F.R. and guests.

1-11-69. Trelkall Beck Cave. C.C., P.F.R. and guest.

Both Shrimp Inlet and the 1. passage in Handwrecker Series were extended. For details see later.

8-11-69. Don Cave, Wharfedale S.H., P.F.R. and guest.

29-11-69. Richmond Cavern J.A., P.F.R.

The Grade 43 survey of the Lower Series was completed, bringing the surveyed length to c. 2750'.

25-12-69. Barningham Moor. C.C., P.F.R.

Two small cave entrances noted.

26-12-69. Kirkby Moorside Area. C.C., S.H., J.C.L., P.R., P.F.R.

Several sinks and risings (see article by S.H.) were inspected, and the first hundred feet or so of Kirkdale Cave explored - it is not blocked, as 'P.U.' states.

27-12-69. Area S.W. of Appleby. C.C., S.H., A.H., J.C.L., P.R., P.F.R., J.W.
A fruitless surface walk - much limestone but apparently no caves.

3-1-70. Murton Mines. J.A., J.K.A., L.B., S.H., J.C.L., P.F.R.

Some of the elusive levels high on the north flank of Scoredale were located. Hardshins Level was especially interesting, with confusing ramifications of flats, with occasional deep shafts in the floor.

10-1-70. Firestone Level, Hudeshope. L.B., S.H., P.F.R.

This proved to be a most interesting level (NY 943.278), and time did not allow a full exploration. The highlight is a shaft apparently over 300' deep

31-1-70. Lyleburn Mine Cave. L.B., S.H., A.H., P.F.R.

The upstream passages were surveyed.

7-2-70. Dow Cave. J.K.A., J.D.A., S.H., P.F.R. and guests.

It was interesting to note the onset and effects of exposure on one of our novice guests. After only c.2 hours underground, including a thorough dousing in a waterfall, she was a text-book example of the early stages of exposure - if this had occurred further underground, there could have been some difficulty.

16-2-70. Lyleburn. J.A., C.C., S.H., P.F.R.

The survey was at last completed.

21-2-70. Old Moulds Level, Arkengarthdale. P.F.R., P. Stephenson, D. Taylor

Rough survey made, c.5000' of passage.

(B.A.C.C.)

28-2-70. Wensleydale. S.H., J.C.L. P.F.R.

Various features of interest in Whitfield Gill, Askrigg, noted. Most of the stream (all in drier weather) sinks and rises in the Middle Lmst., but the rising is choked and the sinks too tight. Further down the Gill is Whitfield Gill Cave, a stall rising cave, not entered on this occasion. The Sod Hole Gill area was then again visited, but accumulations of snow in the shakes made access to the caves very difficult. Cave III was descended - 15' ladder required, no safe belay - and proved to be an impressive phreatic cross-tift system, with a chamber 40' long, 20' wide and 30' high.

The MSG Index of Northern Caves.

Over the months this card index, listing all known caves, pots and 'sites of speleological interest' (sinks, risings etc.) in the area north of Wensleydale, has grown considerably, and at the time of writing contains 141 entries, colour-coded as to their districts. Less than a quarter of these caves etc. are listed in 'Pennine Underground'. A list of caves and their locations taken from the index has been lodged with the Durham C.R.O.

The Group also possess a collection of surveys of caves in the Northern Dales area, which is at the moment fairly complete, with tracings and photocopies of many surveys which have never been published.

North of the Vale of Pickering.

The northern frontier of the Vale of Pickering is composed of a band of Corallian Limestone, extending from the Hambleton Hills to Scarborough, some thirty miles further east. The outcrop of this limestone varies in width between four and seven miles.

The steadily dipping limestone is crossed by numerous rivers and streams, flowing south, which, almost without exception, sink or partially sink. Many of the streambeds are completely dry for long periods during the summer months.

The River Rye partially sinks just above Helmsley and reappears about two miles south-east of the town at Rye House Farm (SE632.823). The water wells up out of a pond only 20' from, and on the same level as, the river.

The next river east is the Riccal, which is reported by some geological surveys of the area to sink - this is not so. A negligible amount of water may enter the limestone, and this would account for the small rising at Dun Keld (SE673.827) near Wombleton.

Hodge Beck is the next stream to the east to sink. The sinks are by Cat Scar (SE670.869), and the resurgence is two miles south-east at How Keld Head (SE685.854), twenty feet below the main Kirby Moorside to Pickering road. The water again wells up out of a pond (this is quite an impressive rising of its type).

In the area between the sink and rising is Kirkdale Cave, famous through its archaeological interest. The cave is nearly 500' long, and is a maze of phreatic tunnels, three quarters full of pre-glacial mud. Rumour has it that Kirkdale Cave (SE678.857) connects with some small caves in Kirby Moorside, two miles to the east (SE694.870). The latter caves have been blocked to stop children

going in. Bones in Kirkdale Cave were proved to be pre-glacial, so one must assume that the cave is also, and it is difficult in this case to theorise as to how the cave was formed and where it is bound.

The River Dove sinks over a short distance below Yoadwath Mill (SE 708.877), and Hotton Beck sinks by Water Swallows Wood (SE709.881). These waters meet underground and resurge at Bog Hall (Keld Head) (SE710.867). The water flows out of an entrance 15' wide x 4' high, but this deteriorates until the roof meets the water 10' in. Hearsay is that diving has been attempted but that the divers were blown out like corks. Many people will, while browsing through their "Pennine Underground", have come across "Dowson Pots". These small holes, now blocked up, are situated in the beck side above the sink, with which they could well have some pre-glacial connection.

Between Kirby Moorside and Scarborough there is only one appreciable sink, and that is Gundale Beck (SE803.867). In the same district there are two very large risings. Firstly, there is Keld Head (SE787.846), just below the main road running west out of Pickering. This consists of a pond about 50' dia. with a large amount of water flowing out at one side. Residents say this pond often 'steams' in winter. Second is the very large rising at Brompton - there are, in fact two, at SE943.822 and SE946.822. One rising is yet another pond, but the second is a 50yd. wide bedding plane, only an inch or two high, from which water flows. The Brompton risings flood quite badly after heavy rain, which gives one a little hope for passages with some air space beyond.

The main hope of finding caves in this area is by digging. Subsidence is common on the limestone plateaus, as at Oxclose and Starfitt Lane, near Kirby Moorside.

Certainly, a lot of water testing in the area is needed, not only to prove connections (information on these can be found in the various Geological Survey memoirs), but to prove the speed of flow from sink to rising. This could give some idea of what sort of cave exists, if the water is not merely extensive seepage along joints and beddings without any real cave development (although this seems unlikely).

In conclusion, it can be said that cave systems probably do exist in this area, and digging, careful searching, a good knowledge of the area and some intelligent theorising, could yield much more of interest.

Stuart D. Hodgson.

As Stuart has suggested above, there is at the moment a considerable amount of MSG interest in the neglected area he has described. Not mentioned in the above article are the Ryedale Windypits, in the Helmsley district. Situated in the Corallian Limestone, these are fissure potholes apparently formed by areas of limestone breaking away from the valley sides and limestone escarpments, and slipping a few feet on the underlying Gault Clay. In none of the Windypits has any trace of water action been found, although some - in particular Buckland's Deer Park (Helmsley) and Antofts Windypits, are of considerable extent, and around 150' in depth.

Reference to the above area can be found in the article 'Caves of Ryedale' by Raymond Hayes, in the 'British Caver', Vol. 9., 1942.

The Windypits are described in an article in 'Cave Science', Vol. 11, No. 12 (1950), by E.P. Fitton and D. Mitchell, but this is now out-of-date and inaccurate - the surveys in particular. The survey of Ashberry Windypits for example omits a considerable part of the system, for some reason. Boyd-Dawkins book, 'Cave Hunting', published in 1874, contains an account and survey of Kirkdale Cave (at the time of writing, an MSG Grade 4 survey of this cave has been commenced).

After the 'genuine' (vadose and phreatic) caves of the Corallian limestone, and the windypits, a third class of 'caves' in the North York Moors area is the old mines, usually of ironstone, or occasionally, jet. These are widely distributed, and some of considerable extent - as on Roseberry Topping, near Great Ayton, and at various points along the coast between Saltburn and Scarborough. These mines tend to be even more unsafe than those in the Pennines, since they are very often driven in loose shale - nevertheless, they are of great interest to the speleologist who sets their sights further than mere tourist trips, and has some interest in the scientific aspects of the subterranean.

JACOB'S WELL CAVE, FROSTERLEY

'WINDOW' IN CLIFF

N.G.R. NZ 035.361. MSG SURVEY CRG Gr. IV,
S. Hodgson, A. Holmes, J. Longstaff, P. Ryder. 21-12-68/3.5.69.
Length: c. 1,000'

SCALE 0 50'

MAG N.
1969.

MAIN ENTRANCE

LOWER SERIES

86" DROP INTO L. SERIES

QUARRY ENTRANCE

WALL WITH DRAINPIPE

CRAWLS

FLOOD RISING CHAMBER

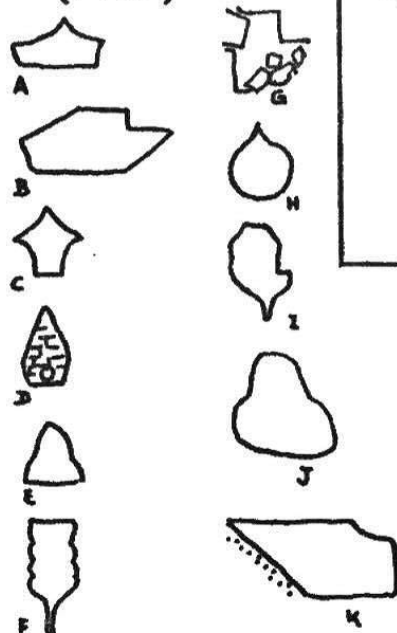
BOULDER RUCKLE

Too TIGHT

BOULDER RUCKLE

STREAM SINKS

CROSS SECTIONS
(1" = 20')



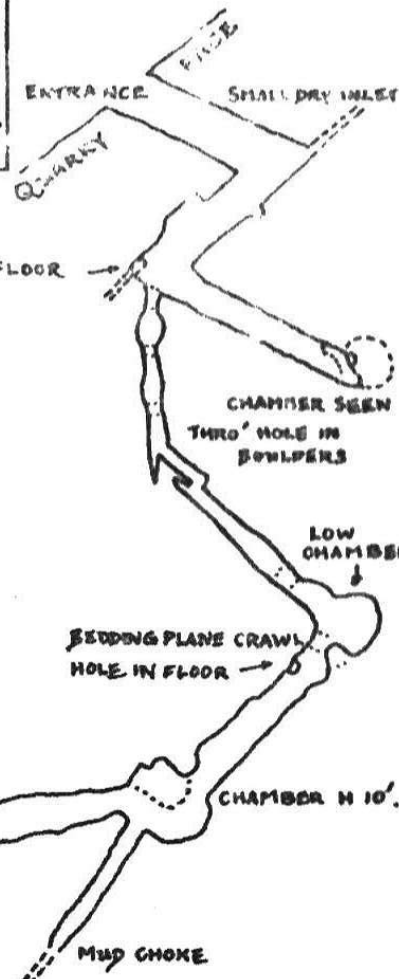
HAREHOPE QUARRY CAVE

N.G.R. NZ 036.362.

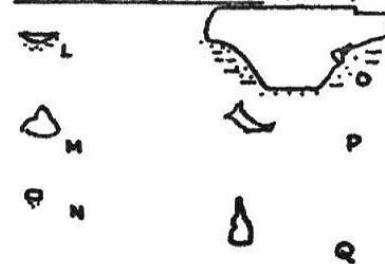
D.C.C. SURVEY.

Length: c. 350'

SCALE 0 50'



CROSS SECTIONS (cont.)



PFR delin

JACOB'S WELL CAVE, FROSTERLEY, WEARDALE.

Pete Stephenson, B.A.C.C. / M.S.G.

This cave is situated in the S.W. corner of Harehope Quarry, in the cliff face above the Bollihope Burn. There are three entrances to the system, all within 40 yards of each other, two being in the quarry face, and the third, and most accessible lying upstream of these, in the stream bank under a large tree.

Passing through this entrance, passages to r. and l. are encountered. The r.h. passage runs on for 80' in a fairly straight line, 10-15' wide and 5-8' high, and intersected at various intervals by short mud filled cross rifts; the passage then swings sharp l. and carries on for a further 90', in this section being 6' high and 4' wide, with a long impenetrable rift in the floor.

At this point a concrete wall blocking the passage is encountered, pierced by a 1' diameter drainpipe. (In the records on the Northern Pennine Club mention is made of this wall, which it is stated was put in in the 1930's to seal off a rising, which presumably was inconveniencing the quarry working). The drainpipe was somewhat enlarged by members of the Bishop Auckland Caving Club in the summer of 1968, and now allows access to reasonably sized cavers.

Beyond the wall the passage swings r., and cross-rifts are again found, of a larger size to those seen earlier. At a distance of 60' from the wall a narrow rift in the floor is met again, into which a sizeable stream sinks. The passage at this point is 12' high and 6' wide, swinging to the l. After a further 30' water emerges from an impenetrable inlet on the r. and joins the main stream, which after a few yards flows from a 20' high boulder ruckle, up which one can climb, and where the sandstone above the limestone can be seen.

On the first trip through the enlarged pipe it was thought that this was the terminal choke, but on a subsequent visit boulders were cleared from an inlet on the r. of the choke, and further stream passage was found. This consisted of a wet crawl of 30', varying from 1-3' in height, to a chamber 6' high and 10' wide. It was in this crawl that the source of the water of the lower (impenetrable) inlet was found, as part of the stream disappeared down a small rift in the r. wall.

From the chamber the passage continued of similar form for a further 20' to a mud choke - at this point B.A.C.C. explorations ceased. On a B.A.C.C./M.S.G. evening trip on 6.8.69, Colin Carson of M.S.G. cleared this choke and pushed on for a further 15' to an impassable choke, the stream coming from a rift too narrow to be entered.

On returning to the entrance, and following the l.h. passage, the two other entrances can be found in the l. wall, after 40' and 100' respectively from the main entrance. The connecting passage varies in size from 5-7' high and 4-6' wide, with a rift in the floor connecting with the lower series - this is at one point penetrable to very thin cavers, and was named by the original NPC and DCC explorers of the cave 'Half Pint Pot'.

The present, dug, entrance to the lower series can be found in the floor where the third (quarry) entrance joins the main passage, and consists of a diamond-shaped nick 9' deep, leading into a passage 3-4' high and 2-4' wide. The main branch after a sharp r. turn proceeds in a north-westerly direction, running directly under the upper passage, which can be seen through rifts in the roof.

On continuing along the upper series in a south-easterly direction, a fine passage 10' high and 8-12' wide is followed, with running off at various intervals small cross-rift passages, all choked with mud. At a distance of 100' from the entrance to the lower series a 'T'-junction is met. The l. passage continues for 30', with a branch running back to form an ox-bow with the main passage. The r. passage runs south, opening to a chamber 20' wide and 12' high. After 30' this suddenly closes down, and at this point the cave ended, until 1955 when Jack Newrick and Dick Hylton dug through the Flood Rising, a short 1' high crawl, which now sumps only in wet conditions.

Passing the crawl, a passage 3' high and 4' wide is found, again with short cross-rifts. This passage continues in this manner for a further 50' where another crawl 10' long and 1' high is encountered. This opens suddenly in a large sandy floored chamber - Flood Rising Chamber - 30' long, 15' wide and 12' high, ending in a large boulder choke. Several small passages run off the chamber, all ending in mud chokes, except a crawl to the l. of the boulder ruckle. This crawl had never been pushed before by my own club or by M.S.G., but on our joint evening meet Colin Carson forced it for a further 70' through a tight stagnant duck, to a small 3' high bedding chamber, ending in a silted inlet - this showed no sign of previous entry.

Notes on the Geology and Surveying of Jacob's Well Cave. PFR.

Unfortunately the Jacob's Well Cave survey had been printed before the evening meet Peter refers to above, on which the system was 'pushed' a little at each 'end', so about 130' of cave remains unsurveyed. The continuation of the streamway runs on for c.50' south from the boulder ruckle where the survey ends. The continuation of Flood Rising Series is from the passage shown dotted, and labelled 'too tight' on the survey - this runs north, then east, and north again, to the final small chamber, probably about 60' beyond the survey end.

The length of cave surveyed to Grade 4C - there is little difference in level between the various passages - is 1020', and the total length of cave will be c.1150'. The system is formed in the upper beds of the Great (=Main) Limestone, collapse exposing the overlying sandstone in the two boulder ruckles. These two boulder ruckles are little more than 60' apart, although the length of passage connecting them is over 700'.

The formation of the cave poses many problems, which, not being a competent cave geomorphologist, I can hardly attempt to answer. The stream seen in the further parts of the passage on the r. of the main entrance is presumably a part of the Bollihope Burn which sinks in its bed near the cave entrance, and reappears in a pool in Harehope Quarry, although the stream enters the cave at the furthest part of the system from the sink. The sinks in the stream bed, and narrow rift into which the stream disappears in the cave, do not seem very well developed considering the amount of water involved, and the well-developed roomy passages of the rest of the system, which must be considered fossil.

Harehope Quarry Cave.

This cave was situated in the south-east wall of Harehope Quarry a few hundred yards north-east of the third (Quarry) entrance of Jacob's Well, and was first explored by Durham Cave Club, who made the survey reproduced here. The cave entrance, which was high in the quarry wall, very near the top of the limestone, has been buried now beneath quarry debris, or else quarried away, and its exact site is not discernible, which is rather a pity, as points of interest might have been revealed if the two systems could have been drawn together on

one 'area' survey. The cave was c.350' long, and well decorated, and apparently of a similar nature to most of Jacob's Well - roomy 'fossil' passages, with occasional rifts in the floor pointing to an unentered lower series. One can assume that before the quarrying, Jacob's Well and Harehope Quarry Caves were part of the same system, phreatic in origin, and invaded at times by the Bollilhope Burn. It is quite possible that the main passages of this system still remain behind the quarry wall, and may be discovered as the quarry advances.

Jacob's Well is in the area planned to be quarried away within the next few months, and parts of it may have already been destroyed by the time this is published. Weardale has been particularly unfortunate in losing its caves - within the past ten years the three largest caves in the valley have all wither been destroyed or made inaccessible. The giant quarries at Eastgate - a hideous eyesore on the landscape - have obliterated the first mile or so of the former Fairy Hole, once the finest cave north of Craven without a doubt. The owners of Hope Level Mine have concreted up the entrance to the level leading to the cave - although it was perfectly safe, and despite protests, and now Jacob's Well is under sentence.

The following article, which may well be of importance, was received recently by the Editor, and is believed to have some connection with Martin Davies of YURT.....

Notes on a fragment of MS found in a Yorkshire Cottage.

The following transcript is taken from a badly mutilated sheet of paper which was recently discovered in an old cottage in the Yorkshire Dales. The MS is obviously incomplete and the earlier writing on this yellowed and crumbling paper has faded to such an extent that it is no longer decipherable. The remainder has been transcribed as accurately as possible and is published below for the first time. The MS appears to be a description of various supernatural phenomena.

"& following theas experiments, wch nothing could induce mee to repeat I determined to sett down my observations forthwith whilst ther is yett time. Tho' this subject may be thought by some to bee frivolous, yett I have taken the greatest pains to check upon the truth of theas accounts & vouch four ther authenticationess.

The 1st case does concern a happening in Priscilla Level an old lead mine of fearsome aspect nr. to the hamlet of Gunarside, wherein two men of good repute & temperate habit did boldly venture as far as a point where the roof is fallen in a treacherous manner. Having paused at that point the bold adventurers were much disturbed to here a cackling laugh and much shaken by this singular experience they hurried from the awsome tunnel lest some malignant spirit, being aroused, should vent its terrible wrath on them.

"& yet again in a cottage inhabited by the Moldywarps Speleological Group, whose name & activities liken them to that furry creature beloved of makers of breeches, the mole. Here in a place with the chill name of Winterings, they do report Strange Occurences whihh are sometimes most quaint and super-natural. As when two of their number did hear footsteps ascend the stair one night & no man was there. Or another one of them did hear the garden gate shut & footsteps coming to there door when ther was no-one. They say ther be other manifestations of the super-naturall ther also. Of the sobriety and good character of these Moldywarps, I am assured they are beyond reproach.

& yet again, some of ther acquaintances from further south, with whom I am more conversant, allso be troubled by spirits (of a super-naturall variety I would add lest anyone mistake my meaning). & as all pot-holders as I think they be called do use most curious names for ther groups, so do these be called, I know not why, in the same manner as a Mongolian peasant's tent, which is, a YURT. This YURT have a cottage on Greenhow nr. Pateley Bridge, wherein two of ther fellows alone on a separate occasion have waken'd to find a light shining on ther closed eyelids. But neither was induced to ope his eyes for fear of what hee might see.

Another of these YURT members had a similar experience in one Shockle Shaft, an old lead mine w^{ch} opens into a series of spacious cavities plentifully endowed with sparry ornaments, tho' the latter have been much pillaged of late by ignorantt visitors who are known collectively as The Yob so it is said.

He to whom this singular experience befell is an industrious fellow of impeccable character (tho' somewhat given to making Surveys, for w^{ch} task he is oft cursed by unwilling assistants and is not a score of furlongs removed from the present writer. Whilst sitting in what is called the South Passage he beheld a light w^{ch} he and his fellows investigated but tho' they looked everywher it was not found. & nor will it ever be so it appears to me, for some things are beyond the grasp of mortal man.

Even as I write I am aware that theas incidents and many others like unto them,

together with my researches, have disturbed the forces of darkness. & it may be that the Prince of Darkness himself be behind these apparitions tho' he has not been seen underground in a long time. As I hurriedly pen these words I feel a chill in the air and some thing is slithering towards the door and there is a stench of some thing vile approaching. There may be no time to escape before..... "

The MS ends abruptly at this point, the writing in the last few sentences having become almost indcipherable. The fragment terminates where its lower end has been ripped to shreds, almost, as one might fancifully imagine, by some huge claws.

One must conclude that the MS is a series of notes, in jesting style, for a ghost story - and not a very good one at that, for to the modern scientific mind the incidents hold no mystery. For instance, I can at this very moment hear a slithering and smell an evil stench which I know is merely

Hard Level Gill - Postscript.

On Saturday March 21st 1970, when the part of this Journal containing the previous article on Hard Level Gill Cave was already being printed, the cave was again extended.

The extension was made by Stuart, Graham Stevens, and John Wedderburn - meanwhile in Hard Level and Spence Level PFR and Jan Arrowsmith were engaged in digging, surveying, and narrowly avoiding falling rocks (the end of Spence Level, is extremely unsafe). Hard Level, until recently blocked 740' in, had been dug out by some party, and is now at this point a crawl under props and shoring, supporting masses of rubble, to further level containing 5' deep water ponded back by the blockage. The shored up section here is also very loose - a mere accidental nudge on one prop resulted in an avalanche of rotting wood, props and tin sheets, but, fortunately, no great weight of rocks.

The extension of Hard Level Gill Cave was made from the tight rift on the r. at the 'T'-junction near the end of February Series. Another 60' or so of interesting passage was gained - the following description is by G.S. -

From the junction one turns r. along a tight crawl to a roomier rift, where large flaked boulders blocked a phreatic tube under the l. wall. Digging gravel and boulders, demolishing one block, and levering another with a crowbar, gave access to the tube (the boulders are still a bit loose). The tube, with one of the shifted boulders in its entrance, is c.10' long, and drops into a rift passage crossing at right angles (2'drop). To the r. is too tight, with a trickle of water visible entering from a fissure. The main rift., on the l., pinches out above to a crawl over shingle, to an elbow bend where a parallel rift is entered. The floor here drops 4' to a very narrow pool, and the way on is a traverse for 7 or 8', to a drop down onto a shingle bank. A high tapering rift (8'high, 1'6" wide 1'6" up) leads to a widening where a trickle enters from a fissure on the l. The rift then narrows to 3' high and 1' wide, and a squeeze allows a view of a small chamber largely occupied by one large block. Straight ahead is a small inlet and there is no apparent exit, or obvious way on. This would be very awkward to work at. The floor is a pool, a few inches deep at the entrance.

Further Prospects.

The latest extension, in its 60' or so length (it has not been surveyed, beyond a Grade 2 sketch plan) drops around 8', making the total depth of the cave around 38' (and taking the length to over 700'). Prospects of further progress downstream seem slight - a fairly conclusive end seems to have been reached, although a second visit will be made.

Hard Level Gill Cave II - this actually comprises two small caves, with a total length of perhaps 60', connected by an impassable slot. It was thought that these might be part of a 'fossilised' upstream part of the main cave, dissected by the Gill. It was thought that the sink of Ash Pot Gutter (a small tributary of the Gill from the south, joining the Gill about 40 yards below the cave) might feed into this part of the system, and flow under the bed of the main Gill into the cave. However, a fluorescein test proved the sink to feed a tiny spring on the bank of the main Gill a few yards upstream from the confluence. Thus it now seems unlikely that further passages of any significance exist on the west side of the Gill. Hard Level Gill Cave II is shown on the survey given here, sketched in to Grade 2.