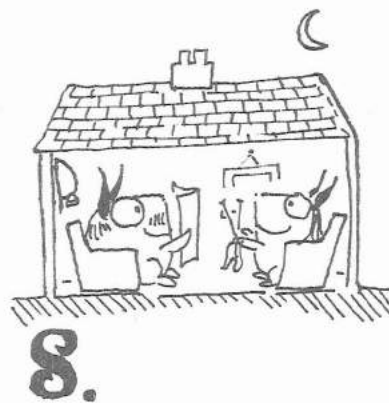
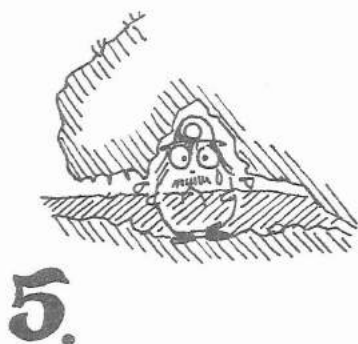
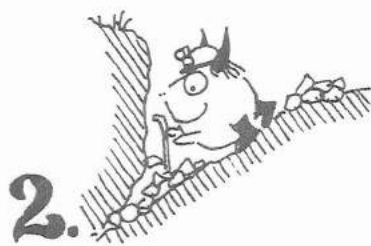
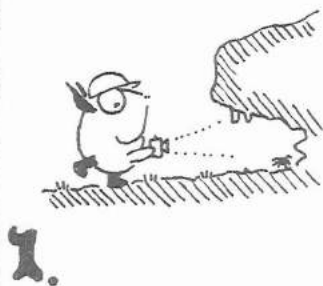
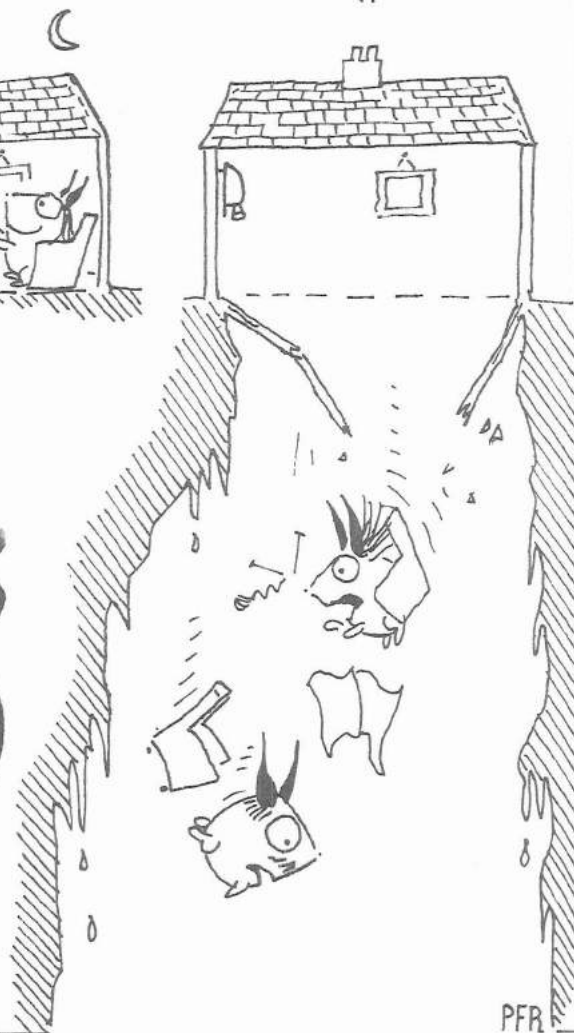


MSG
RICE

PFR



**YES! IT'S
MSG 9**



MSG Nine - Editorial Reminiscences.

The ninth Moldywarp journal in eleven years appears during a period of relative quiescence in the Group's activity. The Grand Mole and Carrier of the Crowbar of Office, Graham Stevens, has departed to Spain for a year, and a consequent lull in the activity of the Teeside branch has resulted. Chris Langthorne holds the fort, and the exchequer, in his absence.

However, elsewhere all is not silent. The North West Durham team, led by the indefatigable Erringtons, soldier on in Teesdale, Weardale and around Alston. In the Deep South, a reformed Sheffield branch is beginning to probe the alien hills of Derbyshire but more of that in our next issue.

Back to the story so far, the tale told in this Journal. Cliff Force Cave, which should have been the cave to end all Northern Dales Caves, one of the most major of all the 'Major Hydrological Systems' at last went. The breakthrough was dramatic, and almost a mile of new passage, some of it spectacular, followed. The first sump failed to halt the onslaught, and was removed, but the second, an unpleasant specimen, halted us just when the cave should have really 'got going'. However, it may yet fall but only to a determined subaqueous mole.

The other finds chronicled are smaller, but as usual, each one a gem to the true Northern Dales Connoisseur. Silver Jubilee Pot is the highest cave of any extent in England, Ward's Hill Quarry Cave the furthest north.

The first stages of an assault on another of the Northern Dales' lost mine caverns, at Flushiemere, are chronicled, and the documentary references to another, at Hudgillburn Mine, Alston. Steve Torran relates the discovery and exploration of Ayleburn Pot, and to round it all off, a searching and intimate questionnaire compiled by Peter Armstrong enables you to find out your indices of personal mould and warpedness, and to rate yourself as a caver.

Credits

Words; Peter Armstrong, Dave and Keith Errington, Chris Langthorne, Pete Jackson, Pete Ryder, Steve Torran.

Cover; Pete Ryder

Printing and General Assistance; Peter Armstrong.

Index to Contents.

	Page
Hearne Beck Cave & Pot	3-4
The Exploration & Survey of the Cliff Force System	5-10
Two Pots on Great Dun Fell	11-14
The Ayleburn Mine Cave - Gutgrinder Inlet	15-16
Some Oddments.....	16
Ward's Hill Quarry Caves.	17-18
Flushiemere Mine & Bropery Gill Level	19-22
Hudgillburn Mine and its Cavern	23-24
The Exploration of Ayleburn Pot	25-27
The Little Blind Moldywarp	28
Rate yourself as a caver - or don't.	29-30

Surveys of Hearne Beck Cave, Cliff Force Cave, Silver Jubilee Pot, Gutgrinder Inlet, Ward's Hill Quarry Cave, Flushiemere Mine and Bropery Gill Level, Hudgillburn Mine Cavern and Ayleburn Caves and Pot on separate sheets, hopefully facing relevant pages. Yet more surveys in the body of the text

.....until the next time, Warp On!

Hearne Beck Cave and Pot, Wensleydale.

History.

One weekend in the summer of 1969 Colin Carson and Stuart Hodgson of MSG returned from a walk across the southern flanks of Great Shunner Fell with tales of a variety of small and choked holes in shakeholes, and, more interestingly, of a small resurgence cave on the east bank of Hearne Beck, at the base of the Main Limestone. They had moved a few slabs of rock to enter a short but roomy cave. It had apparently ended too low over deep mud, "no progress without a lot of digging". but they had surveyed it, finding it to be 50' long.

Years passed. Colin never got the survey drawn up. A brief resurgence of interest in the cave came with the discovery of Fossdale Beck Cave, which at first raised hopes of a possible inter valley system feeding the Hearne Beck rising. However, it was quickly realised that the Fossdale Beck system (see MSG Journal 6) resurged locally, and again the prospect of Hearne Beck Cave was put by for a rainy (or rather, a dry) day.

That dry day at last came on Saturday May 8th 1976 when PFR and a party of non-caving friends, having watched Kev Solman and other members of the Hull brigade disappear into Fossdale Beck Cave, walked over the ridge and located the small resurgence beside Hearne Beck. PFR and Mike Humphries (allegedly not a caver) entered in 'surface gear'. The cave, other than its quickly opening up into a roomy chamber, didn't seem to fit Colin's description at all. There was no deep mud, only a brief wallow in the stream and then a twisting crawl. PFR reached a low, but passable, section which was obviously well beyond the 1969 limit. Bearing in mind the unprepared nature of the party (Mike's lamp had by now gone out and he was waiting with commendable patience three quarters immersed in the wallow) an exit was made, and then a quick trot back over the ridge to find Kev and co just surfacing from Fossdale Beck. They were quickly inspired by a glowing account of the cave, and trekked off over to Hearne Beck. Wetsuited and properly equipped, they explored 180' of cave, ending where the stream flowed from an impassable bedding, but a boulder choke on the l. held some promise.

In due course, on the 25th June, the boulder choke was exposed to Graham Stevens, and promptly yielded. Another 160' of cave was found, rejoining the stream and ending in "two easy entrencher digs" (G.S.Log) where the passage forked into two inlets.

On the 2nd July John Dale and Gary Womack attacked these digs. The first merely gave access to an aven inlet, the second led to an aqueous passage which was left for next time. That was the 16th July, when a large party descended on the cave. The wet passage was pushed to a small chamber, the end, where the water came in from a tiny inlet. The survey was tied up, and on the surface Chris Langthorne was enticed into an open hole about 100 yards upvalley from the cave, promptly named Hearne Beck Cave, where he found c.120' of rifty passages.

John Dale has more recently returned to the area, and had a closer look at the Pot. He failed to find anything new apart from a tight second entrance from the stream bank.

Description of the Cave.

The cave entrance is situated a few yards from the east bank of Hearne Beck, about $2\frac{1}{2}$ miles upvalley from Hardraw. An old grass road can be followed up the west side of the valley, but this approach means a good hour of uphill walking. A quicker but even more hilly route is from the Buttertubs Pass road just above the disused mine on the east side of Fossdale.

The cave is at the base of the Main Limestone, which here dips gently northwards. A line of shakeholes and small sinks marks the top of the limestone, and these probably feed the aven inlet to the cave. Sinks in the bed of Hearne Beck probably account for the main cave stream.

The cave entrance is a small hole between a rock face and a large block which lies across the resurging stream. A few feet of damp gravel open suddenly into quite a large chamber, of standing height. Over to the l. is an impassable inlet, merely an oxbow from the streamway, and to the r. the chamber contracts to a wet hands-and-knees crawl. This swings l., passing an impenetrable inlet on the r., and then rises to a narrow rift. The first bend in this (the continuation is not apparent until the corner is actually reached) is probably the 1969 limit.

The crawl continues, rejoining the stream (met sinking under the wall to feed the impassable inlet in the first chamber, which is only a few feet away, the cave thus far having looped round on itself). A short low section leads out into a second chamber of standing height, with fallen boulders on the l. and a 15" cascade on the stream. Above this the streamway continues as a hands-and-knees crawl, passing a dry oxbow on the r. and then developing into a lowering bedding.

Just before this bedding becomes impassably low, a squeeze under a boulder on the l. ("The Squirm") in an obvious cross joint leads into a dry passage of comfortable hands-and-knees size, running parallel to the impassable bedding streamway.

After 70' of easy going a sandy chamber is reached, where the cave divides. Straight ahead is a short crawl, past a small branch on the r. which allows a glimpse of the stream in its low bedding, into the inlet aven. 12' up the inlet stream enters from a 4" wide rift, and exits under the wall into the low bedding.

Back in the sandy chamber, a crawl to the l. leads through a bedding, the second "entrencher dig", into a wet crawl with a long duck ("The Gurgle") opening into Shrimp Chamber, 8' high and wide, at the far end of which the stream enters from a tiny sump under the l. wall.

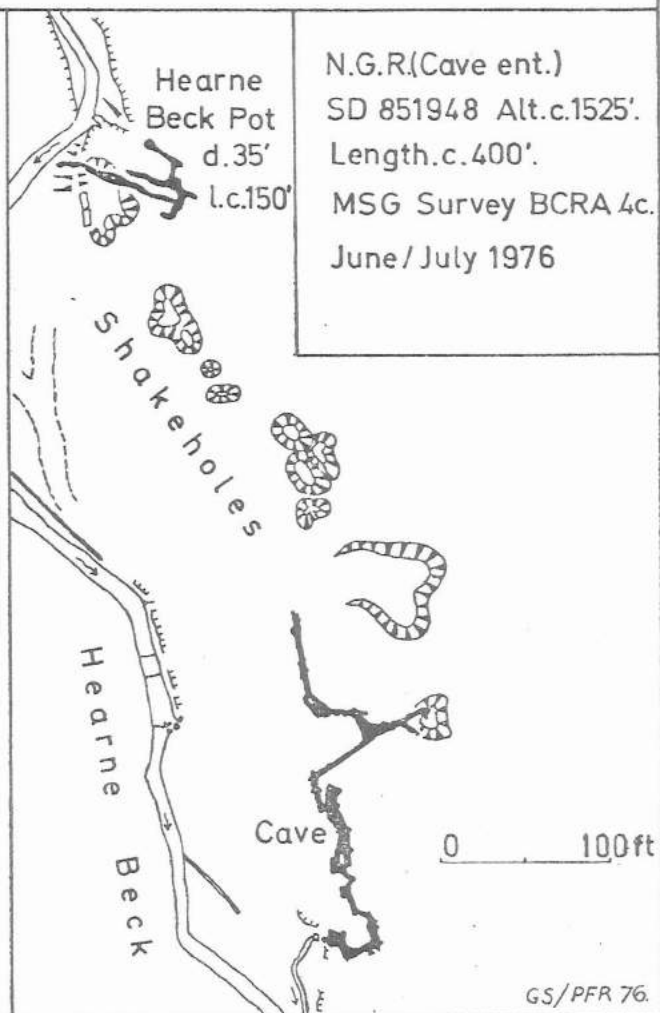
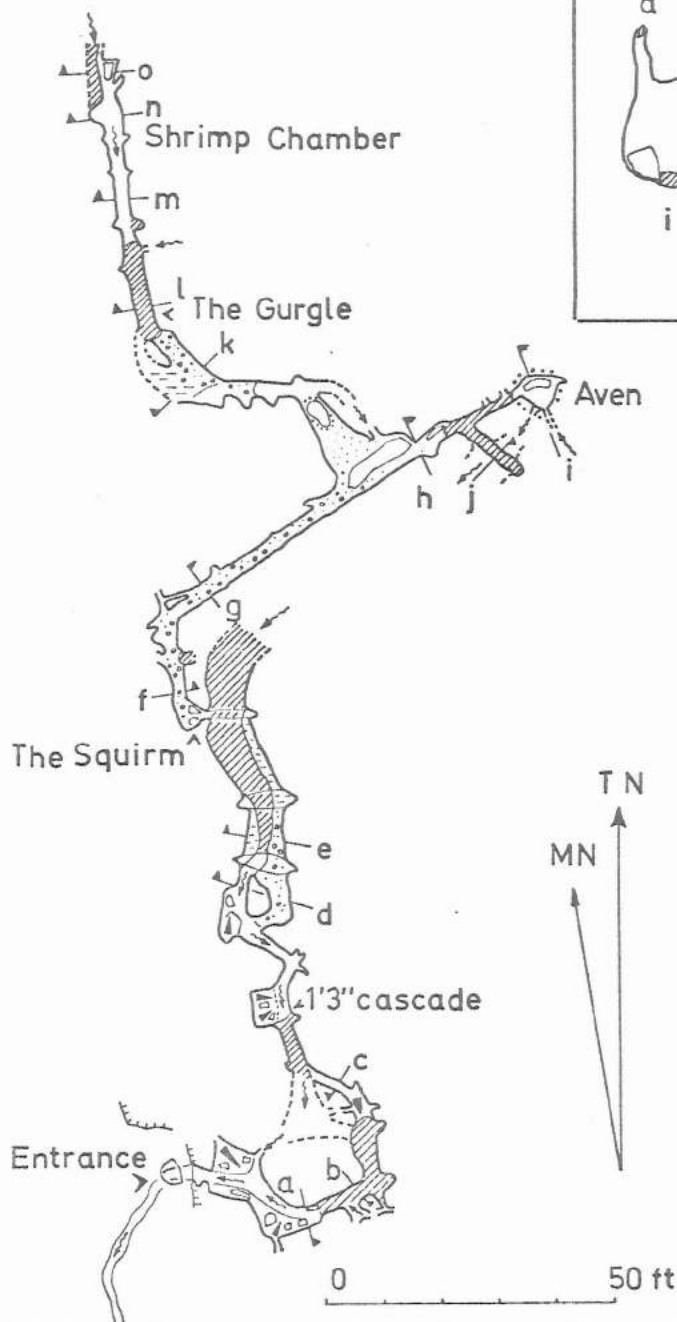
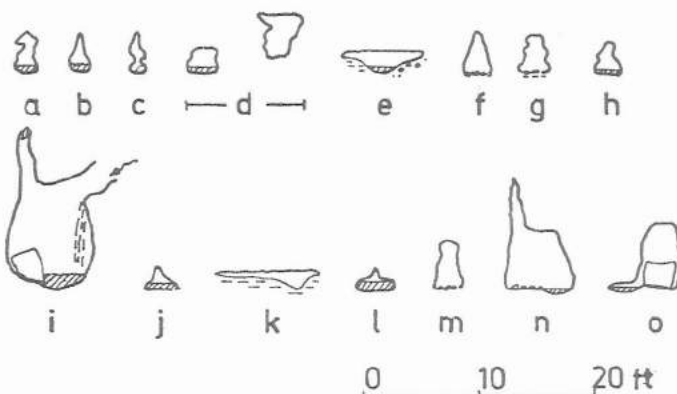
The total length of the cave is c.400', although the straight line distance from the entrance to the end is only half of this figure, leaving a gap of 250' to where the same (?) stream is briefly seen again, in Hearne Beck Pot.

Hearne Beck Pot - Description.

The obvious open pot, in a rocky shakehole a few yards from the stream bank, can be free climbed with care, a 16' drop into a chamber. A squeeze through blocks leads into a roomier passage heading back towards the stream, ending in a squeeze out to daylight, John Dale's new entrance. The main route from the open pot is down a steeply descending rift to a chamber, where a stream is met. To the right this sinks into shingle, but to the left is a crawl into another small chamber with two choked inlets, the stream issuing from the r. branch. To the r. again a climb up leads to a junction, to the r. a connection back to the first chamber, to the l. a very tight muddy crawl difficult to reverse, which has only been followed for a few feet.

HEARNE BECK CAVE Hardraw, Wensleydale

CROSS SECTIONS



N.G.R.(Cave ent.)
 SD 851948 Alt.c.1525'.
 Length.c.400'.
 MSG Survey BCRA 4c.
 June/July 1976

The Exploration and Survey of the Cliff Force System.

Chris Langthorne.

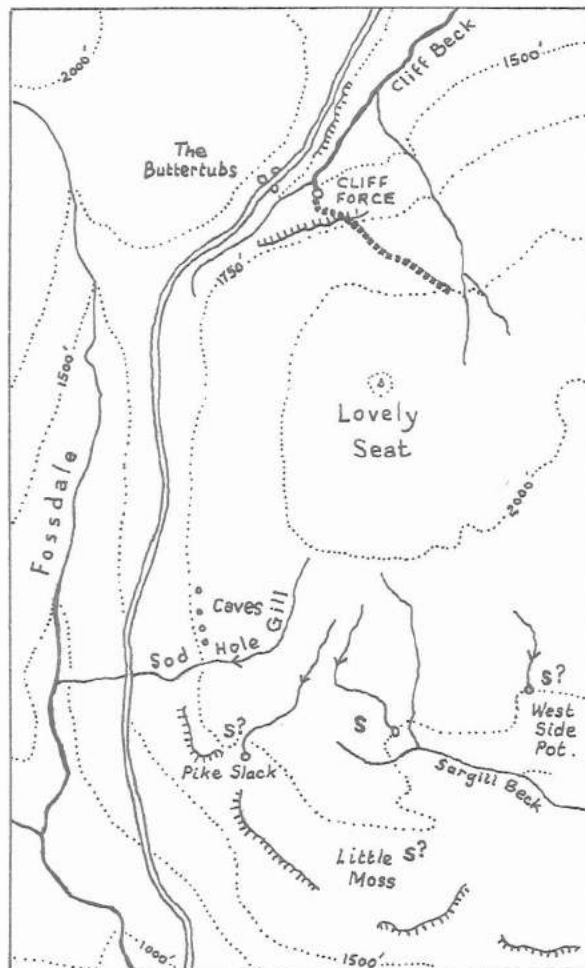
The Geography of the Area.

At Sargill Head on the Wensleydale side of the Swaledale/Wensleydale watershed, part of the headwaters of Sargill Beck (a tributary of the Ure) sink in the Main Limestone, to reappear at Cliff Force rising, just east of the Buttertubs Pass road, in Swaledale. Hence these headwaters are effectively captured from the Ure by the Swale.

This hydrological connection was discovered in 1959. J.O. Myers, in his list of the major hydrological systems in the Northern Dales (NPC Journal Vol.2 No.3., 1963, pp 43-53) notes it as:

"Sink at Sargill, S.D. 879.932 at 1730' to Cliff Force S.D. 875.960 at 1500'. Fluorescein tested 5th to 7th April 1959. Also good evidence of water collected from area of Little Moss $2\frac{1}{4}$ miles away".

The distance between Sargill sinks and Cliff Force is about $1\frac{3}{4}$ miles, and the height difference 230'. The dip in the limestone is slight, and the vertical difference is mostly accounted for by faulting, and the thickness of the limestone. Water sinking at West Side Pot (S.D. 887.933) also probably feeds into the system, as may sinks in the Pike Slack area (S.D. 873.931).



S : Sink or sinks known to feed Cliff Force

S? : Sink or sinks which may feed Cliff Force.

----- approx. line of cave so far explored.

Scale

0 ————— 1 mile
0 ————— 1 kilometre.

Sketch Map of the
Cliff Force System.

Historical Notes.

After the hydrological connection had been proved in 1959, the Northern Pennine Club concentrated much effort into attempting to gain entry into the Cliff Force system, but with little success. In 1962 they uncovered the present entrance shaft, and about 400' of cave was explored, but they were frustrated not to find the main streamway.

The NPC continued digging in the cave for some time, and assorted techniques of passage enlargement were resorted to, but although a point was reached where a stream was audible, it could not be reached (see NPC Journal Vol.3 no.1 for details)

In 1967 UISA members inspected, and dug at, the Sargill Head sinks. They had no luck here, but West Side Pot half a mile further east was entered and explored (see UISA Explorations Journal Oct.1969).

The MSG Breakthrough.

MSG over the years had made occasional visits to the Cliff Force area, but more effort seems to have been put into the Buttertubs and Cliff Beck Head Cave than into the main rising itself.

On Late Summer Bank Holiday Saturday, 1976, a party of four MSG members descended Cliff Force entrance shaft to inspect the sump at the end of one of the passages in the cave, in the extreme drought conditions then prevailing. The writer was duly inserted into the sump, and found it to "go" as a low airspace crawl for c.30', turning l. through a duck and then pinching out after another 10'. Thus foiled, and rather damp, he followed Pete and Elaine Ryder and Kev Solman into the high level passage which leads off from the approach to the "sump", and this ended in a sloping boulder choke.

PFR inspected and probed the top of the choke, and removed a few boulders to find a roaring draught. He retreated, leaving the writer to start excavations. After two hours of strenuous digging and removal of earth down the slope (and ten or so roof falls) a black cavity 6" square appeared. After a threat from the last remaining member (KS) to depart, he hastily increased the size of the cavity, and lunged through the hole in a shower of boulders. A large passage 10' high was entered. Excavation from this side was easier and safer, and the dig was made safe. KS came through, a little jubilation followed, and we had cracked the system after 2½ hours.

Exploration of the Maze Area was started, and about 300' of new cave explored. After an hour our adrenalin had damped down a little, and we realised that we were shattered, and so returned to the surface and related our exploits to the others.

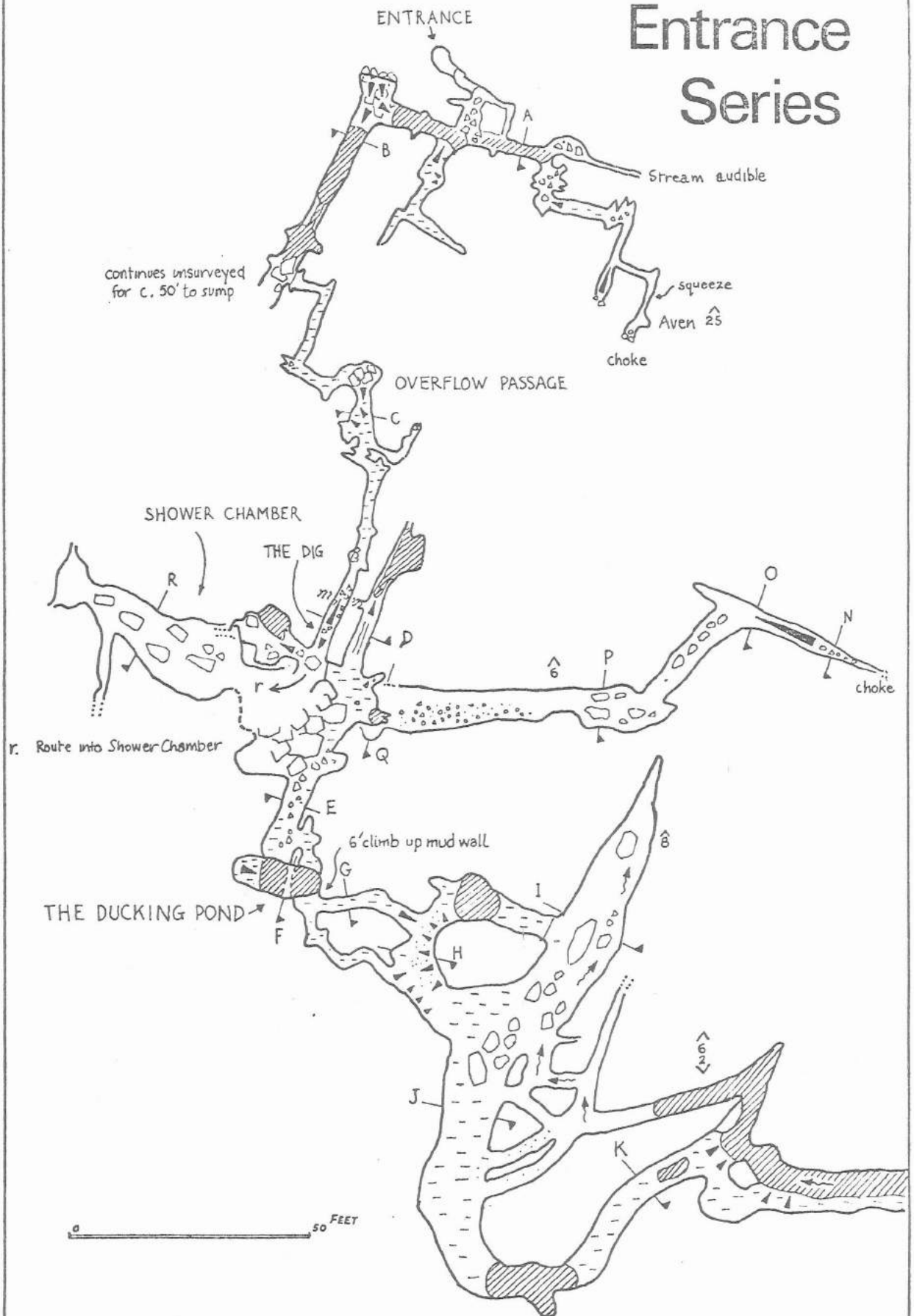
The Exploration.

On the following Monday (30th August) the same party returned; the dig had not run in. The Maze Area was revisited, and the main stream passage soon found, this being 15'-20' wide with a meandering roof tube 6' high. This was followed for c.800', then the roof lowered, and after another 200' a flat out crawl was entered, ending in a wall of boulders with the water bubbling out underneath. A cavity on the left was noticed, blocked by a 2 cwt boulder. Using Mighty Mole's Adrenalin Lift this was soon dispatched, and after a short crawl over boulders Fault Hall was entered.

This impressive chamber, 40' long 50' wide and 35' high is developed on a clearly visible mineralised fault. The stream drops 20' through the chamber down a broken waterfall. Above the Hall the passage changes character, becoming more phreatic in nature, and on average about 8' wide and high, with dried mud formations on ledges. After another 600' a duck was met, which the writer and KS passed, finding a dry side passage beyond which rejoined the streamway. 150' back further downstream, through which the remainder of the party joined them.

The stream passage then swings left and widens, leading out after 300' into a large collapse chamber (later named the Room of Dangling Doom). No way on could be found through the chaos of collapsed slabs.

Entrance Series



Subsequent exploratory trips are best documented in diary form:

3-9-76

The Room of Dangling Doom was visited again, but no further progress made, despite the presence of Graham Stevens and crowbar. The survey, however, was commenced, from the end back as far as Fault Hall.

5-9-76

Two photographic sorties into the cave. The Brook brothers and Martin Davies took some excellent photographs, and then managed to find a hands-and-knees crawl beyond the Room of Dangling Doom, which led to a sump after 300'. KS and the writer surveyed from Fault Hall back to the Maze Area.

1-10-76

Graham Stevens and co; a trip in wet conditions. Shower Chamber, above the boulder ruckle just beyond the breakthrough dig, was found.

8-10-76

GS and co start excavations aimed at lowering the level of the final sump.

30-10-76

A brief trip by the writer and Sue Hamstead, surveying the area around Shower Chamber.

6-11-76

An oxbow was dug out giving a route from Fault Hall to the main downstream passage, avoiding the low wet crawl. GS led further excavations at the sump, and the Maze Area was surveyed.

1-1-77

Low water levels due to frozen conditions. The final sump had a 4" airspace at first, and GS and the writer wallowed in. The airspace diminished to 2", but after 25' an airbell was reached. 6' beyond the passage sumped completely.

18-3-77 The First Dive.

Paul Atkinson attacked the sump, after a long carry in. He completed the first 25' to the already visited airbell, then another 20' to a second airbell, then yet another 20' to emerge in a passage 3'6" high and 10' wide with many fallen blocks. He followed this for an estimated 800', continuing south-eastwards, to where it closed down a little, and he returned.

8-5-77 The Second Dive.

GS, Paul, George Bee and Sue - an all out attempt to get to the end. Bottles were ferried through the sump allowing GS to make his first successful five. The previous limit was passed, only to find a second sump.

13-5-77

GS and the writer surveyed the original NPC cave and the dig area.

8-7-77 Through the First Sump without diving.

Yet another trip by GS and the writer, to dig again at the first sump. On arrival at the sump, it was found that, due to the dry conditions, the water level had dropped 5", allowing us to make some progress. Half an hour of aqua-digging, and we had converted the sump into merely a bad duck. The watery block-strewn passage beyond was dubbed 'Aquablunder Way'. 'Boulder Highway', the drier bouldery passage beyond leads on to a short canal and Sump Two. On the way out the passage was surveyed back to Sump One.

15-7-77 The Third Dive.

GS, PA and John Dale. Sump Two was reached and PA dived. After 70' sand banks blocked the way on, without significant airspace being found. The submerged passage is 6' "down", and there is no chance of lowering the water level that far. There exploration stands to date.

Description of the Cave System.

From the car park at the Buttertubs, Cliff Force rising is clearly visible across the deep but narrow valley of Cliff Beck. The entrance shaft is at the base of the small scar above the rising.

The cave can conveniently be divided into the following parts:-

- (i) The original (NPC) cave.
- (ii) The Maze Area and Shower Chamber.
- (iii) The Lower Streamway.
- (iv) Fault Hall.
- (v) The Upper Streamway, "The Drain Queen's Highway".
- (vi) The Room of Dangling Doom.
- (vii) "Killer Crawl" - to Sump One.
- (viii) Sump One and beyond - Aquablunder Way, Boulder Highway and Sump Two.

The Original Cave.

The entrance shaft, on the r. side of the scar, drops in steps for 20' to a small chamber with three routes leading off, and two streams converging, one from the r. passage and one from the l. The l. branch leads via a mud crawl for 75' to a squeeze into a 25' high aven. Near the beginning of this passage the stream enters from tiny fissures. This area was the scene of NPC's main excavations, but the 25' wall of glacial fill in the aven defeated them, even though running water is audible somewhere beyond.

The dry passage leading straight ahead across the stream from the bottom of the entrance shaft merely turns l. and then pinches out. The l. passage, again upstream (the united streams sink in boulders beneath the entrance shaft) goes over a boulder pile and round a bend to the l. into 3' deep water, ponded back by the boulders. After 40' of wallowing there is an island, and on the l. a high level passage. Continuing with the water, after 30' there is a nasty duck (or sump, in most conditions) and then further wet crawl to where the passage finally pinches out.

Returning to the high level passage, an 8' scramble up leads into a tightish flat out crawl round a double bend, easing after 10'. A hands-and-knees crawl continues to a crawl over boulders beneath a small aven, and then a low muddy section, to more comfortable 3' high passage again. On the l. a narrow rift drops down to a constricted sump, but the main passage continues up a slope to the Breakthrough Dig, now an easy crawl.

This high level passage, 120' long, has been named "Overflow Passage", as various evidences suggest that in high flood the main stream spills through it, after filling up much of the Maze Area.

The New Cave - the Maze Area and Shower Chamber.

From the dig, sliding down a slope leads one into a large collapse area, with Shower Chamber and its associated high level passages above, and the main route on towards the streamway down a 12' hole on the l. To the r. is a boulder slope leading down to another sump.

Shower Chamber.

Entering the new cave from the dig, a hands-and-knees crawl straight ahead leads to a right turn through some nasty boulders, and up into (following the sound of dripping water) a large chamber 50' long and 20' wide and high, entered through a showerbath from above. The chamber pinches out at the far end, where there are some flood sinks in the floor and a tight rift off to the l.

Returning through the curtain of water, the upper series can be entered by climbing up 15' through some loose boulders, into an upper extension of the chamber. On the r. here a hole in the floor leads down a bouldery chute into the main passage below (not recommended). The main passage on from the high level chamber turns sharp l. after 60' into an ascending narrow rift. After another corner this closes down, choked by glacial drift.

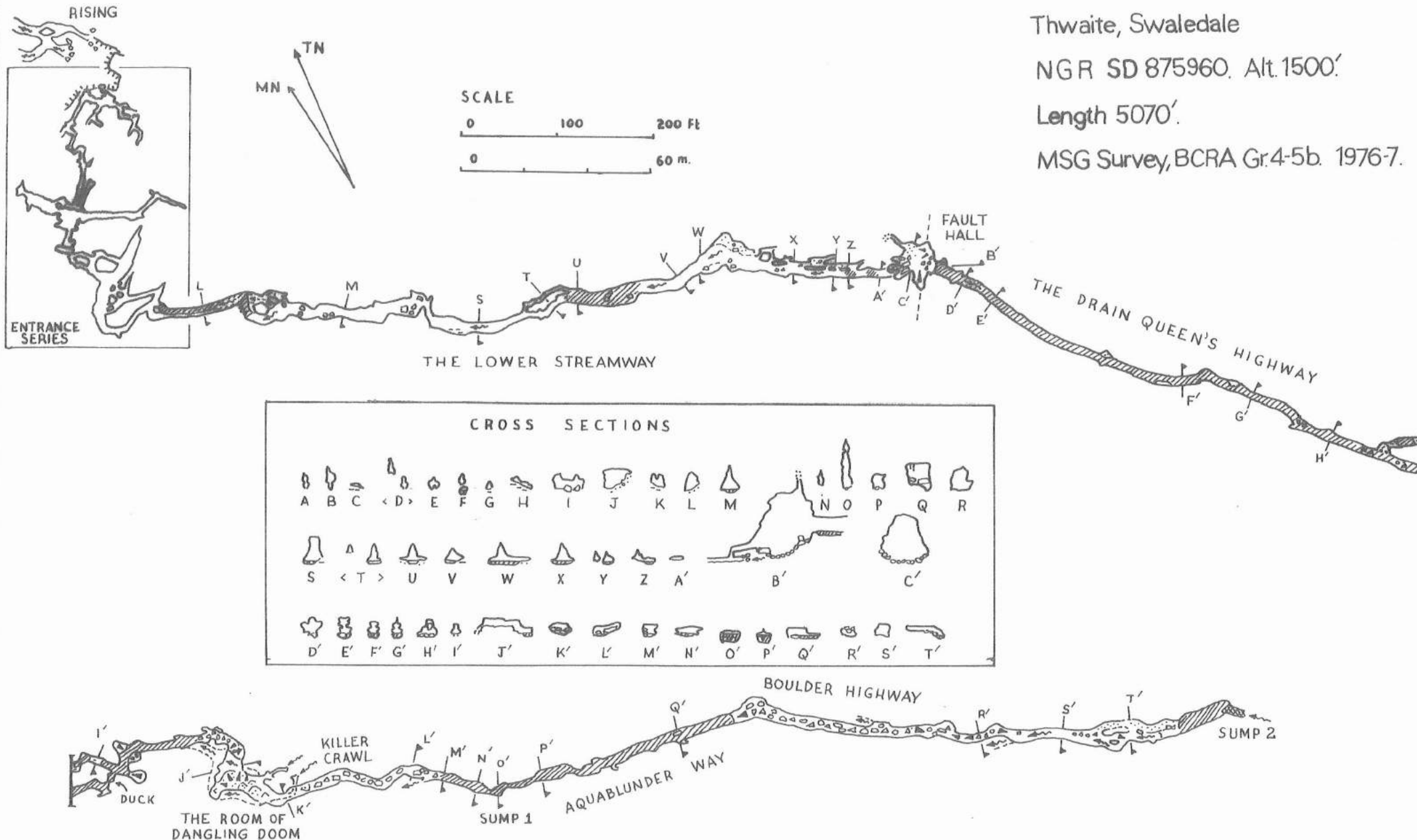
CLIFF FORCE CAVE

Thwaite, Swaledale

NGR SD 875960. Alt. 1500'

Length 5070'

MSG Survey, BCRA Gr.4-5b. 1976-7.



The Maze Area.

Turning l. at the junction just after the dig, and climbing down through the hole in the floor, a roomy passage is entered, with on the l. a 40' long branch ending in yet another sump. Straight ahead is a hands-and-knees crawl to the left of a boulder pile, leading back into solid water-worn passage again. Looking back a precarious boulder pile can be seen ascending to Shower Chamber.

A few yards of easy going end where the floor drops 4' into a pool-The Ducking Pond. The pool occupies the floor of a small chamber, divided by a narrow rock bridge, with, in normal conditions, an easy duck beneath it. At the far end of the chamber, 8' up the wall, is the passage on. Floundering through the pool, or traversing across the greasy bridge, the base of the 8' wall is reached, and a short fixed rope here is a great help in reaching the passage above.

At the top of this short rope climb, the passage divides into two crawls, which soon rejoin in a mud floored chamber - the l. crawl is the shorter route. This chamber is the start of the Maze Area proper. This part of the system is best understood with the aid of a survey, and best circumnavigated by keeping right at each junction, until the stream passage is met.

The Maze Area is not as complex as it appears at first sight, consisting basically of two oxbows with several interconnections. The main streamway water seems to pass beneath these passages, through a predominantly sumped area or local phreas, on the same level as the "sump" at the end of the old cave. This phreas can be glimpsed in several places, e.g. the Ducking Pond and the several sumps around the area of Overflow Passage and the Breakthrough Dig.

The Lower Streamway.

From the normal route through the Maze Area, a sandy bank leads down into the streamway, the first time in the new cave that flowing water is encountered. The streamway is at first 8' high with mudbanks on the r., and continues past various oxbows, developing into a wide bedding with a meandering higher section. This type of passage continues for some distance, past a collapse chamber, to where it changes character quite suddenly into a hands-and-knees crawl over shingle with the stream in a low bedding under the r. wall.

This split-level passage continues for c.100' to where the most obvious route forward is down into the stream in its bedding. On the l. here, a couple of feet above stream level, is a tightish dry passage, which has been dug out to provide a route into Fault Hall avoiding the wet crawl - this should be noted, as it could prove useful in flood conditions. After a period of wet weather, a trip will show plentiful evidence that the Lower Streamway has flooded severely.

The wet crawl in the stream bedding is 50' long, ending in a wall of boulders. It is here that the route on is up a hole on the l., a narrow slot up to a crawl over a large slab, which emerges dramatically into:-

Fault Hall.

This is a most impressive high gloomy cavern. The stream enters from a fine tube half way up the far wall, and above this a blocky shale band is exposed, seen again in the Room of Dangling Doom. This is the feature geologically responsible for the sumps and low blocky passages beyond. Barytes and traces of malachite can be seen along the line of the fault or vein on which the Hall has developed, and in wet weather a shower of water descends from a narrow aven overhead. To the l., in a corner of the chamber, is a sandy crawl (see above) connecting back to the stream passage further downstream.

The Drain Queen's Highway.

Yet again a remarkable change in passage type, to one very phreatic in nature with three tiers of rock shelves. The passage is generally 10' high with about 2' of water, with mud banks and occasional deeper pools which provide amusement if entered unawares. After c.600' an oxbow leads off on the l., and this is the easier route, rejoining the main stream after a nasty duck on the latter. The oxbow is a hands-and-knees crawl for 150', joining the stream passage again just after the duck. After a further section of easy going in a roomy 10' high streamway, the passage becomes cluttered with fallen slabs, and one enters:-

The Room of Dangling Doom.

This is a wide but low chamber 50' long, formed by collapse on the blocky shale band mentioned above. In several places the roof slabs appear to be held up by nothing - people tend to whisper when passing beneath them. The stream divides, one branch flowing from each side of the main collapse, in low beddings beneath the chamber wall. Each branch can be entered for a few yards, but both close down in narrow sumped fissures. This is the original limit of exploration, about 3,000' from the entrance.

At the back of the chamber, a narrow slot between large boulders at roof level leads into:-

Killer Crawl.

A hard section of 300' of predominantly flat out crawling in a passage 10' wide but only 2'-3' high, strewn with boulders. Carrying bottles and equipment in terrain like this is masochistic.

After this brutal crawl the stream is met once more, disappearing down a fissure to the r., to reappear in the short aqueous upstream passages in the Room of Dangling Doom. A further 100' of low stream passage leads to :-

Sump One

Due to mammoth digging operations, Sump One has now been converted into, at any rate in dry weather conditions, no more than an unpleasant duck. The critical section of the sump, just after the first airbell, where Paul Atkinson had to go down five or six feet to pass under some slabs, is now a narrow rift with a few inches of air above up to 6' of water. The formation of the sump seems to be due to ponding behind collapses of the shale band.

Aquablunder Way

The sump opens out into a more roomy passage, aptly named from the numerous submerged blocks which tend to be ideally situated to catch ones shins. The passage is 15'-20' wide and c.8' high, with on average 2'6" of water. After blundering along in the water for 200', the stream is found to emerge from fissures on the r., and one climbs up into a bouldery passage 12' wide and 6' high (Boulder Highway). At one point (cross section R') a hanging pendulum boulder is quite horribly poised. The stream is occasionally seen down holes in the floor on the r. of the passage.

After 300' the stream is joined again, in a rock floored passage. 100' further on an oxbow is reached, with on the r. an easy crawl in the stream and on the l. a flat-out crawl through the oxbow. Standing water is then met again, and after a short canal, Sump Two.

Sump Two.

This is of quite different character to "Sump" One. Paul followed a low descending sandy floored bedding, until after 40' (10' depth) he surfaced in a rift, merely a blind airbell with no exit. He descended again into the bedding, and continued on by digging through a sandbank. The passage continued low and wide, but at 80' from base more digging would have been necessary and he returned. The passage could be seen continuing ahead for 15' or 20', with a rippled sand floor rising to the roof on either side.

Two Pots on Great Dun Fell.

This is another story, like that of Hearne Beck Cave, starting in the earlier days of MSG's history, and leading to a more recent sequel. The highest limestones in England are found on the Pennine Escarpment, overlooking the Vale of Eden, and caverns have long been known to exist in Silverband Mine, just below the summit of Great Dun Fell. Parts of what must have been a very extensive system of phreatic caverns in the Great Limestone remained accessible here until relatively recently (see NPC Journal Vol.3 no.1), but the mine entrance has now collapsed, and there seems little hope of regaining entry.

On 15th May 1971 Colin Carson and Pete Ryder went prospecting along the limestone outcrop N of Silverband Mine, the obvious plateau formed by the Great Limestone which commences just beyond the hush above the mine tips and dips N to the headwaters of Crowdundle Beck, before rising again on the flank of Little Dun Fell.

It was on this plateau, not far beyond the hush, that a small sink was found, with a very tight shaft perhaps 15' deep. Courage could not be summoned up to attempt a descent of this, but our consciences were assuaged when the pulling out of a few blocks from the next shakehole to the W revealed the top of a shaft of more friendly proportions. The ladders were unrolled and Colin descended, shortly to reappear reporting an easy 35' pitch in a fluted shaft, with no way on at the bottom. This seemed very typical of the Northern Dales pothole, so after covering the shaft and dubbing it 'Silverband Pot ii' (the tight undescended stream sink qualified as no.1) the prospectors philosophically moved on, finding little more in the remainder of the day than Silverband Pot iii (really on Little Dun Fell, half a mile or so further NW), a bouldery hole dropping 30' to a ruckle of decomposing sheep.

Some years later, following the publication of 'Northern Caves Vol.5' in 1974, Roger Sutcliffe of the Gritstone Club wrote to FFR asking what we knew of an extension to Silverband Pot ii - he had been down the pot, and found, instead of a choked floor, a short further drop into several hundred feet of passage. Persons unknown had apparently moved a few boulders and made quite a respectable discovery - they remain unknown to date.

A mental note was made to return to the pot. However, Great Dun Fell is rather remote, and it was not until 4th June 1977 that, after a considerable time spent searching, an MSG party of Chris Langthorne and Pete and Elaine Ryder managed to relocate the entrance, finding a stout iron bar wedged across as a belay. Survey was commenced, hindered by Chris having forgotten to pack the survey pad. When the one envelope (the only paper in the possession of the party) had been covered by survey drawings and mud, the party exited. Three days later (7.6.77) Chris, Graham Stevens and John Dale returned and completed the survey, proving the hole to be c.700' long and c.55' deep.

Meanwhile the Ryders had embarked on a long surface walk around the Great (and Four Fathom) Limestone outcrops on Knock Fell. Little was found beyond many capacious shakeholes. However, on returning to the cars at Silverband Mine along the Great Limestone bench E of the mine, they stumbled on an open hole high in the side of a shakehole, a hole that looked very "fresh" as if it had only just dropped open.

A weary GS was apprehended just as he was getting washed after his survey trip down Silverband Pot, and lured, by means of tales of promising gloomy depths, back to the new hole. CL had fled back to the

cars with the lifeline, so one ladder was utilised instead of the missing rope, and Graham descended the other, unclipped himself, and vanished. Half an hour later he reappeared, telling of a hundred feet or so of passage and an undescended pitch. The new hole was named 'Silver Jubilee Pot', it being Silver Jubilee weekend, and the name fitting in well with the auriferous nomenclature of the area.

On the 10th September GS and the Ryders returned to survey Silver Jubilee Pot. No major extension was made, but the hole totalled 250' in length and certainly made up for in interest what it lacked in dimensions. It is probably the highest limestone cave in the British Isles.

Descriptions of the Caves - Silverband Pot.

The entrance to Silverband Pot is a 2' diameter hole in a shakehole, with (1977) a stout iron bar wedged across it. A comfortable ladder climb of a little over 35' reaches the floor of the fluted shaft, and a narrow slot then drops a further 10' over a large fallen block to the head of the streamway.

A narrow fissure back underneath the entrance pitch is probably the inlet for the stream (virtually dry at the time of the survey), but shuts down almost immediately. This almost certainly connects with the constricted shaft (Silverband Pot i) at the sink in the next shakehole to the entrance.

Downstream is a narrow rift streamway, gradually gaining height. The various short side passages and 'oxbows' formed by rifts parallel to the streamway are best described by means of the survey. At the second "crossroads" junction, c.120' from the entrance, the easier route is to turn r. and then l. along a rift (with a high aven) parallel to the stream rift, which is very tight. Where these rifts rejoin, the stream drops away down an impassable rift in the floor.

Turning l. at this junction, a route can be followed through a number of parallel rifts and collapse chambers, and across a traverse, to a chamber where the stream is briefly glimpsed again, in a deep narrow rift, just before the cave ends in a boulder choke.

There are several areas of unstable collapse chambers in the cave (especially in the final 100' or so), and great care should be taken. Although the straight line distance from the entrance to the final choke is barely 300', total passage length is c.700', and depth around 60'.

Relationship of the Cave to Surface Features.

From the entrance shaft the cave runs a little west of north, beneath a line of large shakeholes. The more complex areas of the cave each appear to be situated under a large shakehole, the first "crossroads" and aven under the first, and the second "crossroads" under the second. The final complex of parallel rifts and collapsed chambers lies under a third, very large, rocky shake. In the second shakehole from the entrance is a 12' deep shaft, which appears from the survey to be directly above the 30' high aven near the second "crossroads".

Unfortunately time did not permit a full survey of the line of shakeholes which runs north from the cave down towards the valley of Crowdundle Beck, where the cave stream probably resurges.

Development of the System.

The cave appears to have originated as a phreatic cross rift system of unknown extent, in which areas of closely spaced joints are reflected by local complexities of passages, and also on the surface by large shakeholes. The system became infilled, and the present cave is the section of the original which has been cleared by vadose water, both the main cave stream, and wet weather flows from the shakeholes above.

SILVERBAND POT

Great Dun Fell, Westmorland

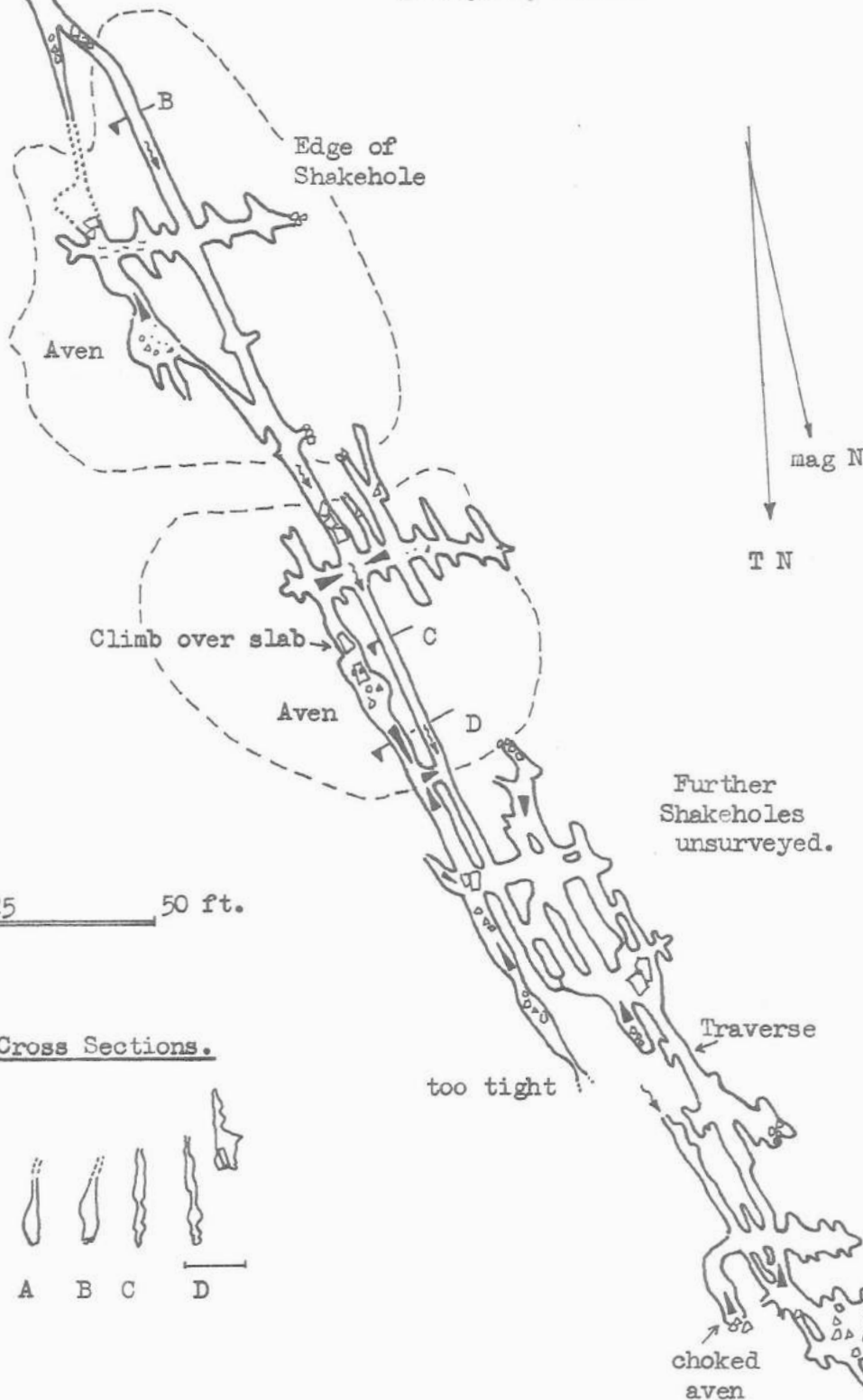
N.G.R. NY 704322 Alt.c.2350'

Length 700' Depth c.55'

MSG Survey BCRA Gr.4/5b 4/7-6-77

C.Langthorne, E.L.Ryder,
P.F.Ryder, G.Stevens.

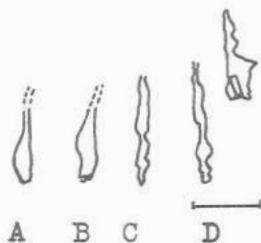
Entrance
35' pitch.
10' climb.



Scale

0 25 50 ft.

Cross Sections.



Silver Jubilee Pot - Description.

The entrance to Silver Jubilee Pot is an oval hole high in the side of a shakehole, about $\frac{1}{2}$ mile ESE of Silverband Mine, in an area rather devoid of landmarks other than a multiplicity of shakeholes.

There is no obvious belay at the entrance, and a stake lower in the shakehole is the best arrangement. At first sight the top of the shaft appears loose, but in fact it drops 4' through "solid" shale before enlarging into a roomy rift in the limestone. The pitch is 18', to a muddy landing between a slope down to a calcited choke to the N and to the E a muddy chute dropping to the head of a blind 20' pot. This is easily traversed across, onto a bridge between it and an adjacent shaft, similar but narrower, above which the roof lifts, and roomy passages lead on straight ahead (South Passage) and to the l. (North Passage)

South Passage.

This commences as a scramble over boulders in an attractive phreatic passage 4' wide and 5' high (but with narrow rifts continuing both above and below the wide section), to another blind 20' pot in the floor. Traversing over this and climbing up 5' (an amusing manoeuvre on the return journey!) a crawl is entered, turning r. and then l., through dried up crystal pools (care). After 25' yet another constricted blind pot in the floor is crossed, and then there is a short narrow crawl up a muddy slope into the small final aven, the passage beyond this being totally choked by fill.

North Passage.

North Passage is at first of easy walking height, to another choked pit in the floor, followed by a scramble through fallen boulders and a short crawl. This opens out just before some crystal pools and a turn l. into a walking sized passage. After 15' this reaches a junction. To the r. and straight ahead are excessively tight rifts - that to the r. can be seen to continue for at least 20', but would require a very thin man to force it. The main passage is to the l., and is an attractive walking sized passage with some good formations, and eroded fossil corals standing proud of the walls. In the floor is yet another blind pot, little over 1' in diameter.

After 25' the passage turns sharp l. again, into another roomy section, with a narrow choked rift in the floor. A loose slope up leads to another sharp bend, to the r. This opens into a northward trending rift, the floor dropping away to a 20' pitch, the limit of Graham's original exploration. The pitch (free-climbable with care) is again blind, although of rather larger dimensions than the other blind pots in the system, but further passage can be gained by traversing across it. A few feet of rift lead to the head of another, smaller, blind pot, and beyond a slope up to a choke formed by a dropped block. It is difficult to see past this, but the passage appears heavily choked.

Total length of passage is c.250', and depth 35'

Development of the Cave.

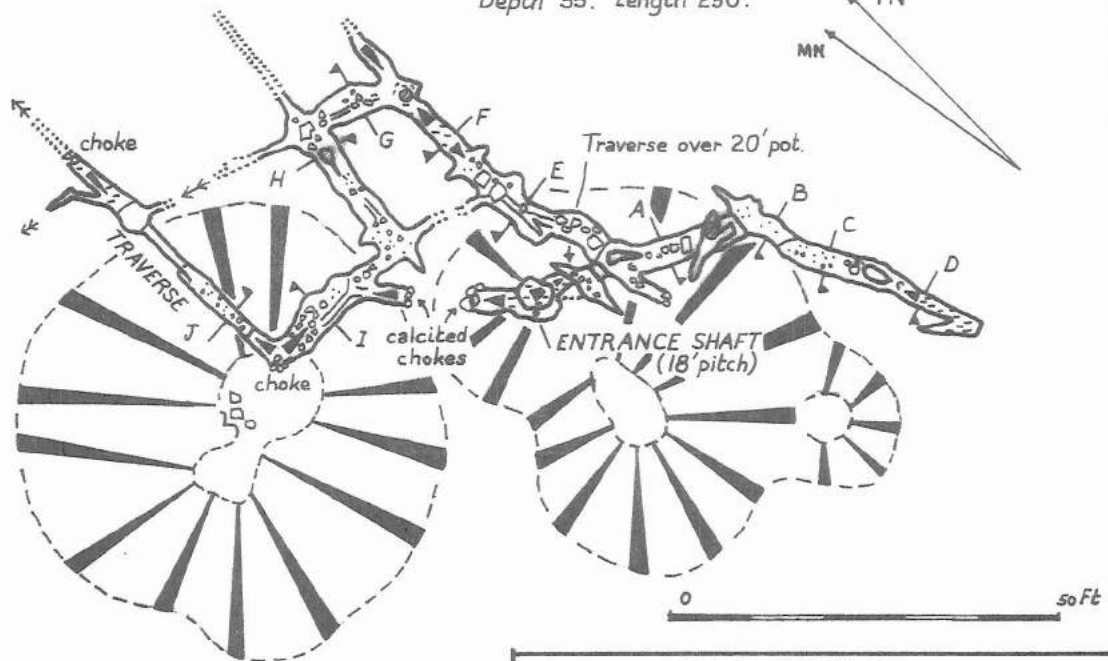
Basically the system consists of a length of phreatic passage, choked at each end by fill, running c.20' below the top of the Great Limestone. There are no less than nine blind or choked pots in the floor, each dropping another 15' to 20'. The crystal pools in South Passage appear to have drained only relatively recently, an interesting point when one recalls that Silverband Mine Caverns were full of water when first tapped by the miners.

Silver Jubilee Pot obviously warrants a closer inspection, before more concrete postulations can be made on its development. It is a most unusual small cave, with no parallel in the Northern Dales.

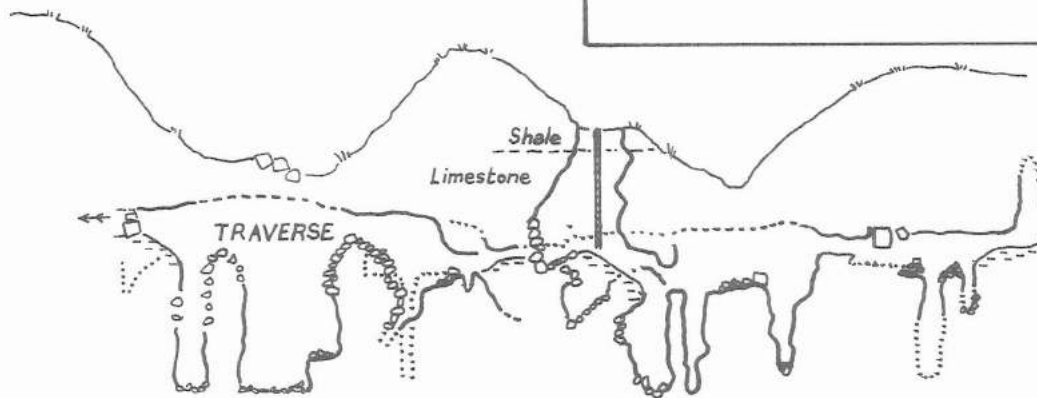
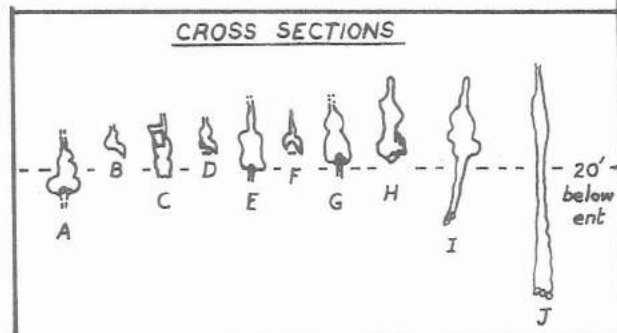
SILVER JUBILEE POT

Great Dun Fell

NGR NY710316 Alt: c. 2,525' o.d.
Depth 35'. Length 250'.



PLAN



PROJECTED SECTION ON 136°

MSG SURVEY BCRA Gr.5b. 10.9.77
E.L.Ryder, P.F.Ryder, G.Stevens.

PFR

The Ayleburn Mine Cave - Gutgrinder Inlet.

During the initial surge of MSG interest in the Ayleburn Mine Cave, following the discovery of the Downstream Extension, the whole system was surveyed. Whilst working in the Upstream Passage above the entry from the mine level, Stuart Hodgson and Pete Ryder briefly examined two side passages.

The first passage was an obvious tube on the r. immediately after the end of the boulder ruckle above the 5' waterfall (the ruckle which the Durham Cave Club first passed in 1955 to explore the Upstream Passage). The first 25' of the passage, a dry inlet, were surveyed, until the going became somewhat restricted and SDH advanced alone, returning with difficulty to announce c.100' of narrow twisting crawl, still "going".

The second side passage, also on the r. and 90' further upstream, was an easy flat crawl to a chamber. On the r. here was a tight winding crawl - noted as a possible "other end" to Stuart's crawl - which was not pushed. The obvious passage ahead was for some reason not pursued either.

On Saturday June 28th 1975 the first side passage was once again visited, this time by Kev Solman and the Errington brothers. Undaunted by the tight winding crawl they pushed on into rather easier going, to be halted by a grille of straw stalactites after an estimated 300'. The passage was obviously of considerable interest, and a concerted "push" and survey were obviously necessary. Summoning up the effort took another couple of years, however, and the final assault was not made until 10th December 1977.

This time PFR managed to pass the first squeeze, and aided by Barry Hunt surveyed 150' of sinuous constrictions to a chamber - which was in fact that entered via the "second side passage" back in 1970. Instead of retracing their "steps" (in fact not a single step, in the normally accepted sense of the word, had been possible) through the initial section of the passage (The Contortions), an easy 30' crawl (now dubbed 'Coward's Entry') took them back into the main streamway. Meanwhile, John Dale and Chris Langthorne, having found their way into the inlet the east way, had passed the grille of straws without undue destruction and followed 40' of lowering crawl to where further progress would have required undue effort.

The further section of the passage was surveyed, and a few more feet gained at its extremity, by the Erringtons on the 8th January 1978.

Description of the Passage.

The accompanying survey makes a foot-by-foot description of the passage unnecessary. Gutgrinder is obviously an old inlet which has undergone several stages of development.

The original passage, fed either by a small sink on the north flank of the Ayleburn valley, or by a sink of the Burn itself, comprised the further reaches of Gutgrinder and Coward's Entry, joining the main streamway at the latter. This route was then for some reason "long-circuited" by the inlet stream, which left Coward's Entry "high and dry" and found its way down through The Contortions, which twist along roughly parallel to, and sometimes only a few feet from, the main stream passage.

The Contortions passage itself shows two stages of development, being a tube with a later trench in its floor. Neither tube nor trench are generally large enough for progress in one of them alone, and both must be uncomfortably utilised. At one point, 30' from the downstream end of the passage, they diverge, the tube leading off to the r. with its floor 1'6" above that of the trench. Both routes are negotiable, but only just, and they quickly reunite.

The fourth, and present, stage in the history of the passage is abandonment by the inlet stream. Where has it gone? There are no known active inlets in the whole upstream section of the cave.

Total length of the Gutgrinder passages is 425'. This takes the length of the Ayleburn Mine Cave to over one mile. Whilst the greatest possibilities of spectacular extension are at the downstream end of the system, beyond the sumps, the upstream end is obviously of greater complexity than was first thought. The 600' extension to Ayleburn Pot (see elsewhere in this Journal) is further evidence of this.

The master survey of the Ayleburn system is currently being redrawn, to include the new extensions, and copies will shortly be available.

Some Oddments in Stockdale, Swaledale.

Found by Chris Langthorne and the Ryders on 15th October 1977...

Stockdale Beck Cave SD 865980

Obvious low entrance in Undersett Limestone on S bank of Stockdale Beck. Low silty crawl for 15', might extend with digging.

Stockdale Beck Rising SD 863979

A rising accounting for about half the volume of the Beck, a few yards N of the stream. Obvious cave entrance above but completely choked 12' in. Dug to no avail. Probable sinks in bed of the main Beck a few hundred yards upstream, SD 862978, and in opposite direction where a small tributary sinks, SD 864982. Entrance near latter into rift 10' deep then too tight.

Totterblock Pot SD 863980

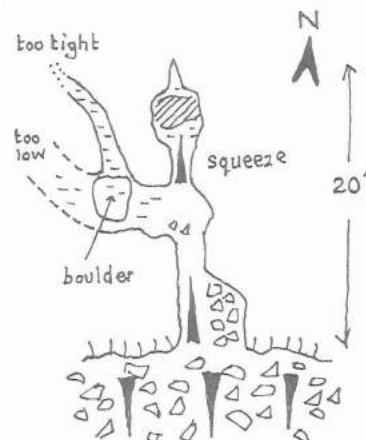
Found by striking straight up the valley side above Stockdale Beck Rising to a shake with a prominent block of upstanding limestone on its E side. Slide down 15' to squeeze, not passed due to proximity of very large loose slab above, onto 8' drop, narrow continuation visible.

..... Thackthwaite Beck, Wensleydale

Brockholes Cave SD 988914

In a Main Limestone scar, easily found by following up the small valley which continues above Thackthwaite Beck Rising (Thackthwaite Cave). Cave entrance found and dug out by Mike Ridealgh on Sunday 23rd October 1977, cave further explored by Stuart Hodgson and Pete Ryder on Friday 30th December 1977.

Slide down to junction. Straight ahead a squeeze over a clay bank to a pool and dead end. To l. is boulder, crawl under into bedding which becomes too low, over and to r. into narrow tube which becomes too tight. Total length c.35', name from name of the area given on the O.S. 6":1 mile map.



Sketch Plan of Brockholes Cave

GUTGRINDER INLET

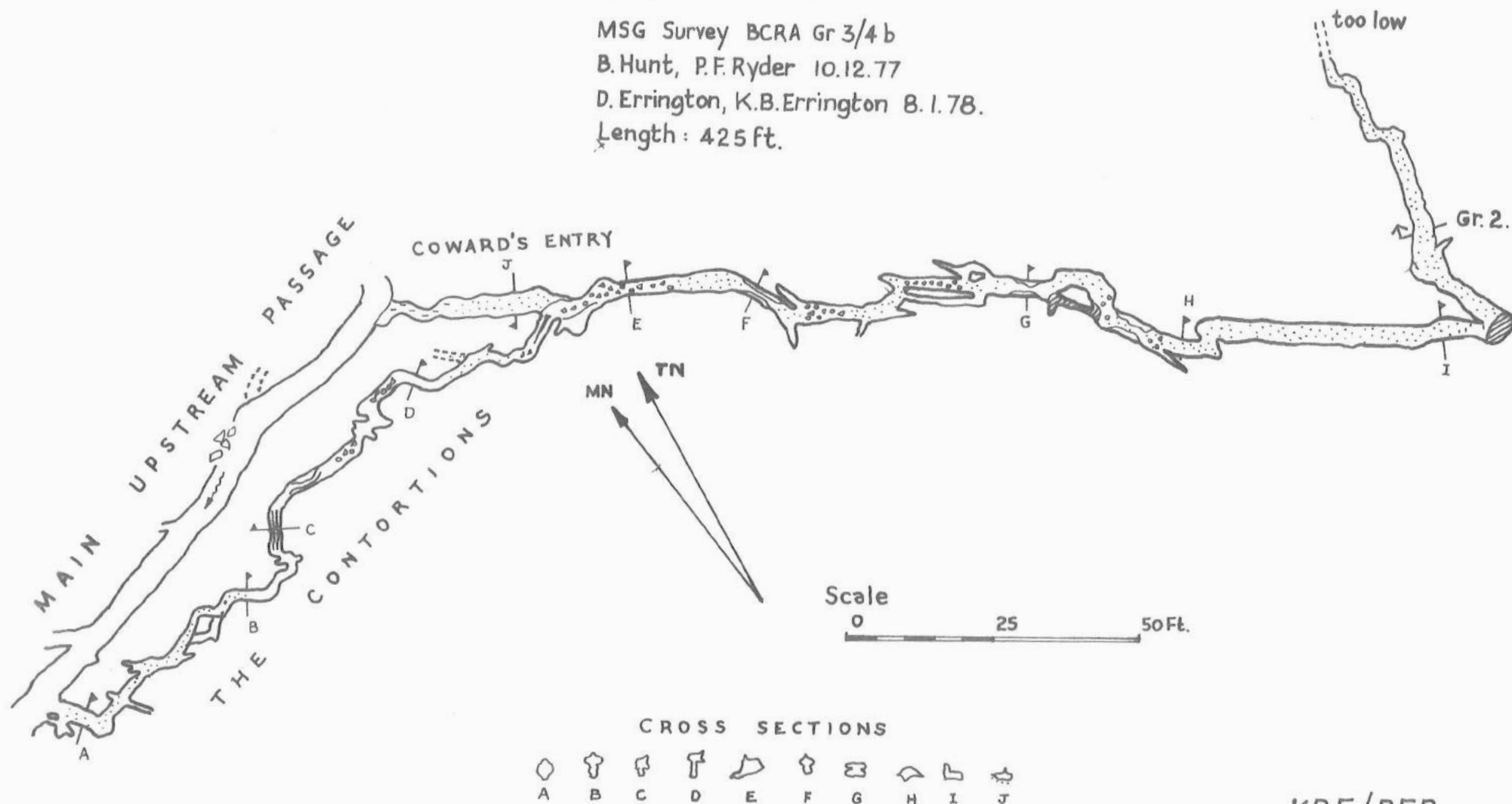
AYLEBURN MINE CAVE

MSG Survey BCRA Gr 3/4 b

B. Hunt, P.F. Ryder 10.12.77

D. Errington, K.B. Errington 8.1.78.

Length: 425 ft.



KBE/PFR.

Ward's Hill Quarry Caves, Rothbury, Northumberland.

The existence of open cave entrances in the disused Ward's Hill Quarry (NU 079965), $3\frac{1}{2}$ miles SSE of Rothbury, Northumberland, was first brought to the attention of MSG by a letter from Mike Ridealgh of York, in 1976. The quarry is used by Newcastle University Geology Department for fieldwork, and it was whilst mapping the Whin Sill exposure here that Mike had noted three cave entrances.

The site, so far away from any other known caves, sounded of considerable interest, and so on 24th February 1977 John Habershon and Pete Ryder visited the caves. The two main entrances proved to lead into the same system, a series of clay floored phreatic passages, ending in a low clayey chamber. After surveying the cave the party surfaced, thoroughly plastered, into a blizzard. John's attempts to remove his boots, tenaciously adhering to his feet by a mixture of clay, ice and affection, were memorable.

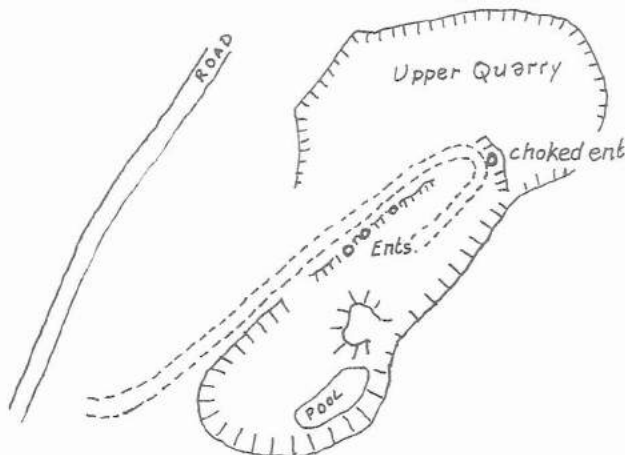
On 30th July, in far more clement conditions, Chris Langthorne and PFR returned to photograph the cave and try and push a low clayey crawl at the previous limit of exploration. Unfortunately this choked after a few feet, but back outside a new entrance was found, and 25' of cave explored to where a chamber could be glimpsed through an eyehole. This looked easily enlargeable, but the party did not possess a hammer. Much banging with loose rocks, fists etc. proved of no avail.

The same duo returned to the scene of these efforts on the 29th October, after a long walk over Simonside searching for a rumoured cave which turned out to be a rumour without a cave. A heavy lump hammer soon converted the eyehole into a capacious void, but all ways on from the tiny chamber beyond were thoroughly choked.

Situation.

Ward's Hill Quarry opens rather strangely, almost like the crater of a volcano, in the crest of a ridge (Ward's Hill) running NE down towards the valley of the Coquet. A minor road runs over the open pasture alongside the quarry, and there appear to be no problems of access.

A track runs down the quarry from its SW end, dividing the shallow



Ward's Hill Quarry,
Sketch Plan.

upper section of the workings from the deeper SW end, containing a stagnant pool. Most of the rock exposed is Whinstone, and it is for this (used as road metal) that the quarry was worked. The track turns back on itself to descend into the lower workings, and on the bend, in the NE wall of the quarry, is a small choked cave entrance. Continuing down the track, on the r. (i.e. NW) is a small exposure of limestone, and in it three cave entrances. The first is the small North Cave, the second two the entrances of the main part of the system.

Description of the Cave - The Main System.

The northern of the two entrances of the Main Cave is the larger, a scramble over rusty iron and assorted debris dropping into a tubular passage, rising steeply with the dip of the limestone. After a few feet a junction is reached, and beyond this the tube contracts as it rises to a choke, 30' from the entrance.

Back at the junction, the r. passage commences as an easy squeeze, widening to a more comfortable crawl as far as a large fallen block, beyond which the passage is choked completely, 35' from the junction. The l. passage is a crawl up a muddy slope into a more roomy bedding chamber, 8' wide and 3' high. At the far end this bifurcates, the l. fork a tubular crawl running for 25' to the Main Chamber. The r. branch, a larger descending passage, leads past a low l. branch rejoining the tubular crawl just as this enters the Main Chamber, to a final junction. On the r. here is an impassably narrow rift, on the l. a small hole dropping into a short passage which also leads into the Main Chamber.

The Main Chamber itself is developed on a bedding, and is 25' long by 15' wide and up to 4' high. From the entry into the chamber from the tubular crawl a passage doubles back to the l. to the second entrance. This takes the form of a tube with a trench in its floor, up to 5' high - a passage type which may be more widespread in the system but masked by the clay fill.

At the far end of the Main Chamber the chamber contracts to a gently descending crawl ending after 40' in a fork, with a tiny bedding on the l. and on the r. an impassably narrow descending rift, the deepest point in the system. Just before this final junction is a low bedding on the r., which rises steeply up a muddy slope into quite a roomy chamber, 25' long and 8' wide, and up to 4' high, The Warren of Gummy Bunnies. The chamber rises with the dip of the limestone, to its upper end, where the dip levels off, but the floor continues to rise to make a clayey flat out crawl. Just before this low section there is a bedding chamber on the r., ending in a choked descending passage. The floor of the chamber is honeycombed with rabbit burrows, and there is plentiful other evidence of their occupation. This warren-within-a-warren earned the chamber its somewhat unusual name.

The low crawl which is the westward continuation of The Warren of Gummy Bunnies was the scene of a brief dig, opening a flat squeeze alongside a fallen block to where the floor dropped away again - but immediately beyond the passage ended in a boulder choke.

Total length of passage in the Main System is c.350', and there seems little prospect of any extension without serious large scale digging.

The North Cave.

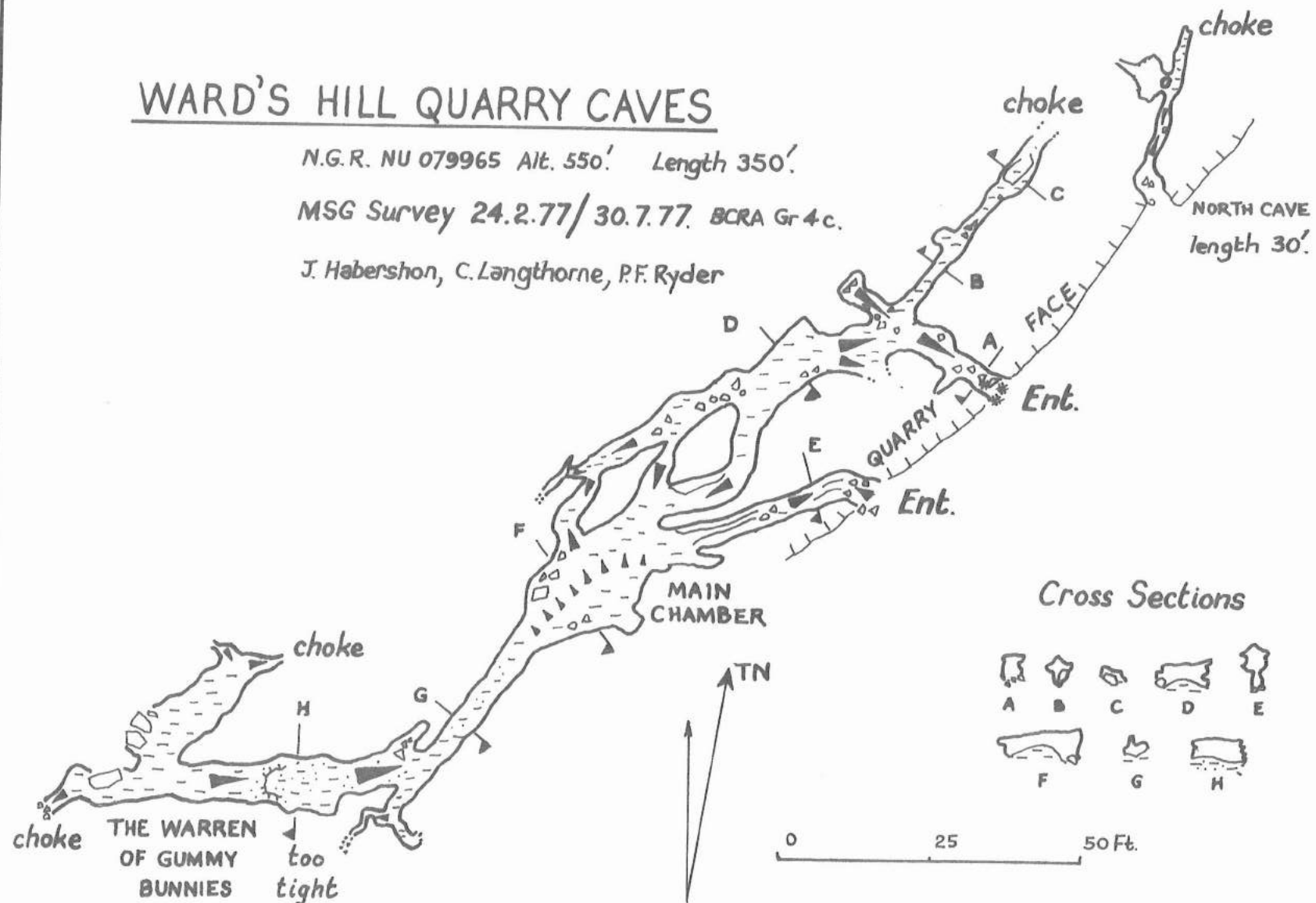
This entrance was only noticed on our second visit, being hidden behind a rusting roll of barbed wire wedged beneath an undercut in the quarry face. Removing the wire, a low hole drops into a rift passage running NE, parallel to the quarry wall. The floor drops away to c.6' below the entrance, and then rises again through a narrow arch into a tiny "chamber", with on the l. the former eyehole which had allowed only a tantalising glimpse of the cavity beyond - this in fact turned out to be only an enlargement on a cross-joint, with all routes beyond thoroughly choked with clay, 30' from the entrance.

WARD'S HILL QUARRY CAVES

N.G.R. NU 079965 Alt. 550'. Length 350'.

MSG Survey 24.2.77/ 30.7.77. BCRA Gr 4c.

J. Habershon, C. Langthorne, P.F. Ryder



Flushiemere Mine and Bropery Gill Level.

The Erringtons first became interested in Flushiemere in 1970, because it promised (by Weardale and Teesdale standards) a lengthy trip.

Flushiemere Level was found to be collapsed a few hundred feet in, so the other adits in the valley were explored, and Bropery Gill was tried in July 1971. It wasn't until 1973 however that it was certain that Bropery Gill led into the Flushiemere workings - confirmed by Graham Stevens - because Dave Errington couldn't read Dunham properly backwards.

At various times during the following years various people have attempted to reach the natural caverns reported to exist in the mine; however, the most probable route, a rise on 'C' vein, is in a very unstable condition.

Recently the Erringtons and Barry Hunt (the Bionic Vicar) have concentrated their attentions on the rise mentioned in Dunham which communicates with the main level. This rise was climbed with Acrows and faith; the Erringtons had both feet firmly planted on Acrows, but the Rev. B. Hunt trusted in a "sky-hook".

Barry Hunt and Dave Errington eventually reached the 'C' vein workings on 21-1-78. These workings are higher up the rise - about 60' in all - than expected, and have yet to be fully explored and surveyed.

Brief Description of a "Tour of the Levels".

The description in Dunham is quite accurate. The entrance to Bropery Gill Level is at N.G.R. NY 908320, on the east bank of the stream.

Dropping into the level at the collapsed entrance one continues through arching, over a small collapse, and past a small passage off to the l. which leads to a blind shaft. Continuing along the main level for another hundred feet brings one to the head of the main shaft in the mine, with the North Branch Level of Flushiemere Mine 120' below. The timbering at the head of the shaft is decayed and unsafe, so it is not used to descend from this level.

Continuing along Bropery Gill Level, after a short distance the arching ends and some formations can be seen, small white stalactites and "miners' blood" formations (soft iron-stained stal). After about 150' another passage and rise off to the l. is met - this has not yet been fully explored. The same distance again brings one to a shaft on the r., which communicates with the lower levels (but has unstable walls, hence is not used). After a further 200' one reaches the shaft which is normally used to reach the lower levels. There are bolts fixed for a belay on the l. wall, and 30' of ladder is necessary. Please use the bolts, to avoid damage to formations on the wall of the shaft. Bropery Gill Level continues for a further 420' to a forehead, with a shaft on the l. full of clear water (the roof is unsafe in this section)..

From the bottom of the 30' shaft a short crawl over loose rocks leads into a level heading back towards the entrance. This level goes past a short blind passage on the l. and over a small collapse (the base of the unstable shaft from Bropery Gill Level) to a junction, with Rylands No.1 Vein on the l. and Rylands No.2 Vein on the r.

Rylands No.1 is the most impressive level encountered in the mine, consisting of a belt of flats up to 20' wide. It is entered by climbing down a 12' rope (a ladder may be needed for the return).

From the bottom of the rope there are three possible routes. Two of these form a short closed loop, containing an old wooden tub, leading back to a forehead. The third, the main part of the workings on Rylands No.1 Vein, continues westwards towards the main shaft, which joins all levels.

Before reaching the main shaft, a ramp (just beyond a wooden ore chute) leads off to the l. from Rylands No.1 to a higher level reached through a hole up a short sloping rise. This higher level runs parallel to Rylands No.1, and has four holes in its floor, through two of which one can see down into Rylands No.1. The other two holes are directly over the main shaft, and are dangerous (one is covered over).

Rylands No.2 Vein runs north-west from the previously mentioned junction to a forehead. The level has been surveyed for 300', to where a slope of loose deads drops c.15' into a passage which runs back to rejoin Rylands No.1 at the main shaft.

At the end of Rylands No.1, beside the main shaft, are two short blind passages. Immediately above these is a further short passage leading into a small cave. This cave had not been entered by the miners, but they had thrown a bottle and a piece of newspaper into it, and then walled it up.

The main shaft from Rylands No.1 is 75' deep, landing on a 10' high pile of loose shale blocks. One slides down this pile to reach the floor of Flushiemere North Branch Level. Heading north for about 800' brings one to a forehead, with initials of miners and a date written on the wall. Heading south from the bottom of the shaft leads one, after about 900', in water which gradually becomes waist deep, to a collapse at the base of a rise.

(Ed. note - this rise was, until about ten years ago, an open shaft from the surface, about 50' deep, through which Colin Carson of MSG and a party of Durham Cave Club members once visited part of the workings described below, and the mined natural passages on 'B' Vein. This shaft appeared to date from the last phase of the working of the mine, during World War II. It is now totally collapsed and could not be easily reopened).

Carefully passing the collapse - there is much loose shale - the level continues for another 1600' over small rock falls and through stretches of waist deep water. On the r. of the passage is a rise communicating with the caverns on 'C' Vein - at present being explored.

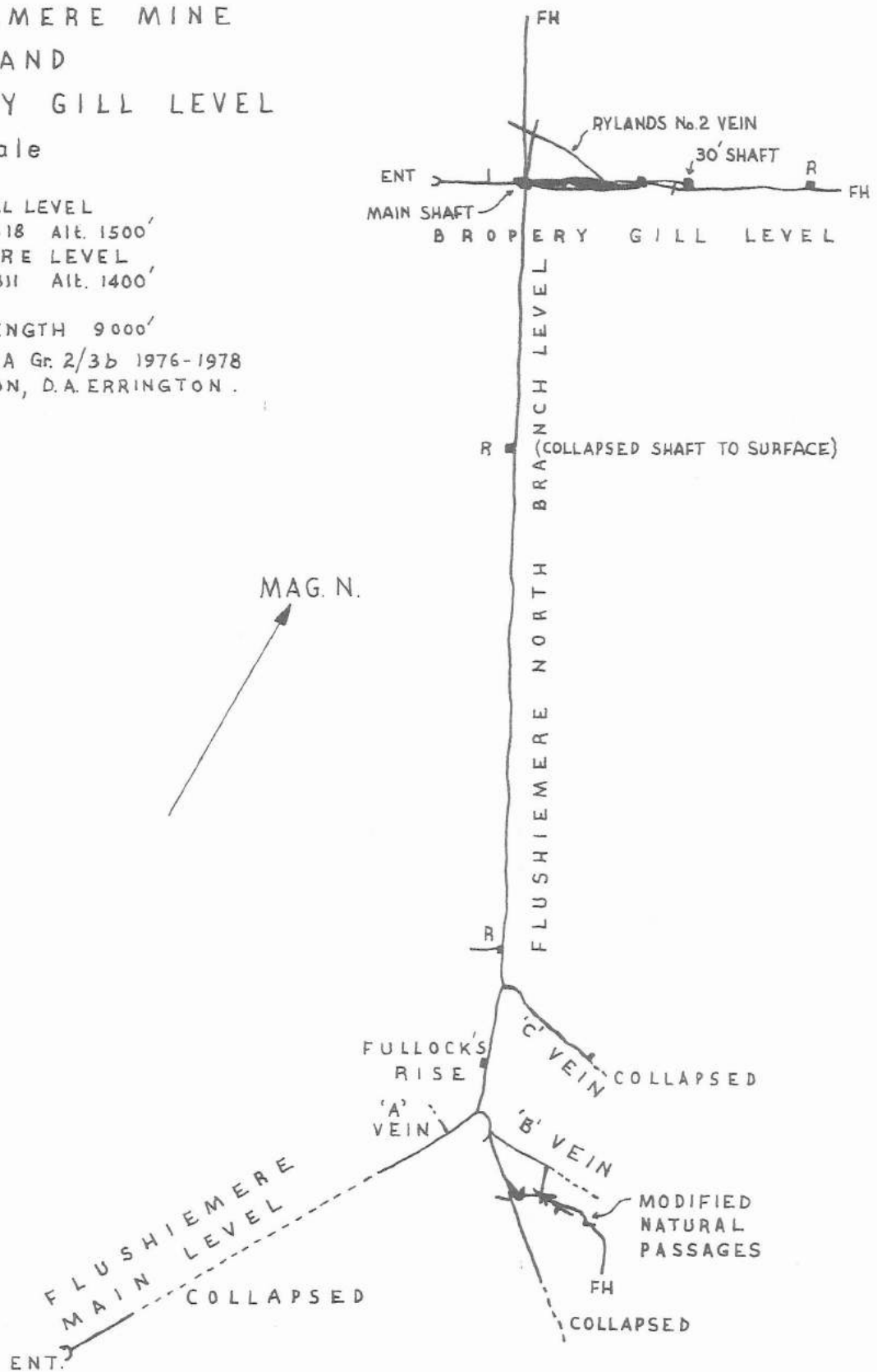
Continuing south of this rise for 100', 'C' Vein branches off on the l. This level has been arched over because of the loose shale, but there are now many collapses and the arching is deformed in places. A rise 350' along 'C' Vein also communicates with the caverns above, but is considered unsafe.

Returning to the main level, 400' south of 'C' Vein, a passage on the l. (here called "South Workings") with deep iron-stained mud, branches off into 'B' Vein and mined natural passages. At the junction of the South Workings with 'B' Vein (80' from the North Branch Level) there is a large wooden tub, and water enters through natural fissures in the limestone roof.

FLUSHIEMERE MINE AND BROPERY GILL LEVEL Teesdale

BROPERY GILL LEVEL
N.G.R. NY 909318 Alt. 1500'
FLUSHIEMERE LEVEL
N.G.R. NY 909311 Alt. 1400'

SURVEYED LENGTH 9000'
SURVEY BCRA Gr. 2/3b 1976-1978
K.B. ERRINGTON, D.A. ERRINGTON.



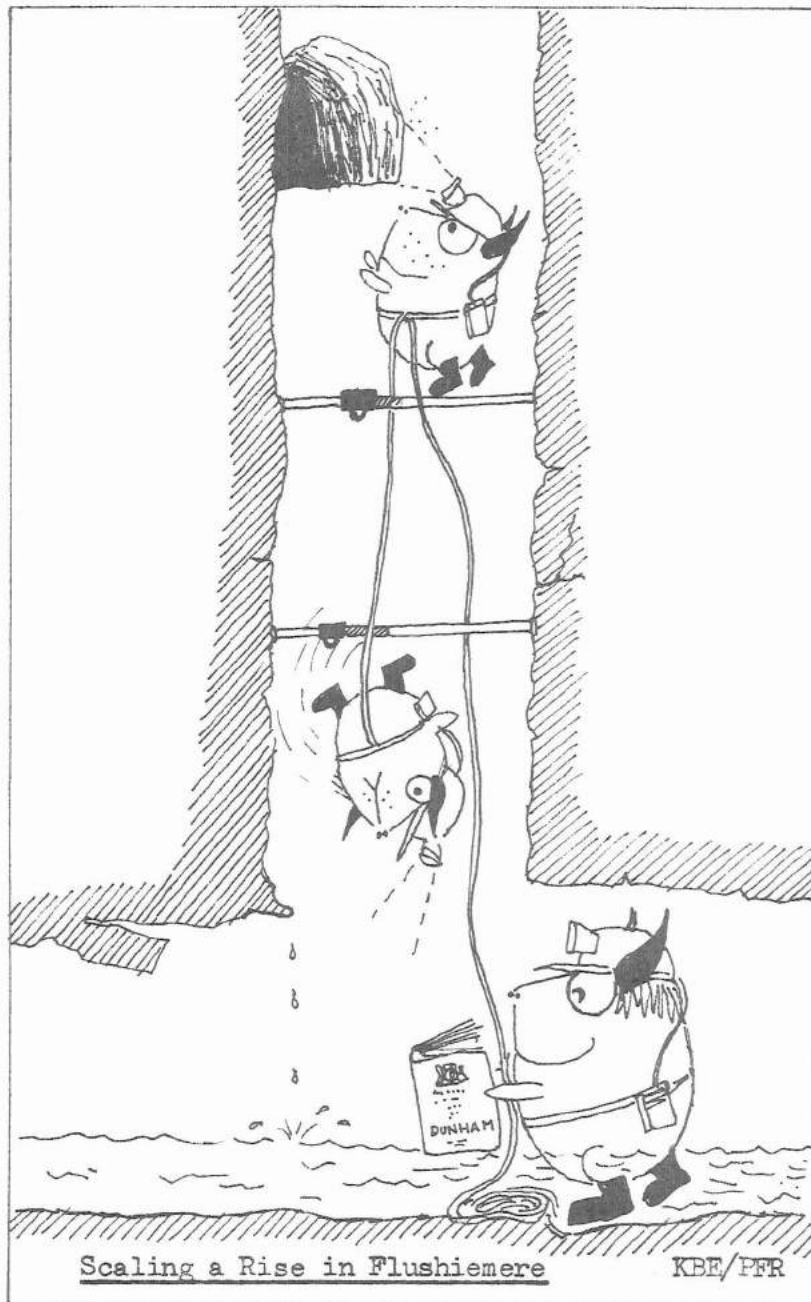
SCALE
0 500 1000 FEET

The South Workings continue southward and have been surveyed for 500' over some large collapses. After 250' is a junction with a short mud-choked passage on the r., and a passage on the l. leading into more modified natural passages which continue for 300'. About 80' along these passages a rise leads into further passage. At the base of this rise a low passage communicates with 'B' Vein.

Returning to the North Branch Level, the route continues south-west, towards the former main entrance to the mine. The water gradually deepens as one passes 'A' Vein and a walled rise on the r., and then eventually the water reaches the roof, ponded up behind the major collapse which blocks the level.

Dave Errington.

Ref K.C.Dunham, 'The Geology of the Northern Pennine Orefield'
Vol.1, H.M.S.O. 1949 p.295-297.



Hudgillburn Mine and its Cavern

Pete Jackson.

Hudgillburn Mine is situated about 3.5 km E.S.E. of Alston in Cumbria. Its major development as a lead mine appears to have taken place in the early nineteenth century(1,2) when a speculative crosscut adit cut a complex of short veins on the north east side of Middle Fell, producing approximately 54,641 tons of galena concentrates between 1815 and 1835.

Very little is known of the geology of the veins except that the orebodies are said to have been confined mainly to the Great limestone, the major limestone bed of Alston Moor, and generally to be up to 12 feet in width but exceeding 20 feet in some places (3). It is also said that the veins were decomposed and very rich (4).

Apart from its history as a major producer of lead ore, the mine is of interest in that a natural cavern is said to have been discovered, associated with the Hudgillburn Third Sun vein (5). Unfortunately the mineworkings are no longer accessible as the main haulage adit, Hudgill Burn Level, has collapsed for some 25 yards from its entrance, in ground consisting mainly of boulder clay. However, there are two accounts extant which give some details of the location, together with an old mine plan which indicates a cavern.

The cavern is said to have been discovered in the spring of 1816 by a rise driven from Hudgill Burn Level, at a point 36 feet above the level. The position of the rise is given as being 2346 feet from the entrance to the level (5). The width is said to vary from 3 to 6 feet overall, generally narrower at floor level, and containing a large groove in the roof. At one point the cavern is said to be mineralised with zinc blende, which may indicate that the cavern is a type of flat replacement deposit. At another point the cavern is said to have numerous branches all intersecting each other and it is said of the exploring men that "they found no end to these numerous intersecting openings in the rock" (6). The length of the main cavern is said to be 320 yards (6).

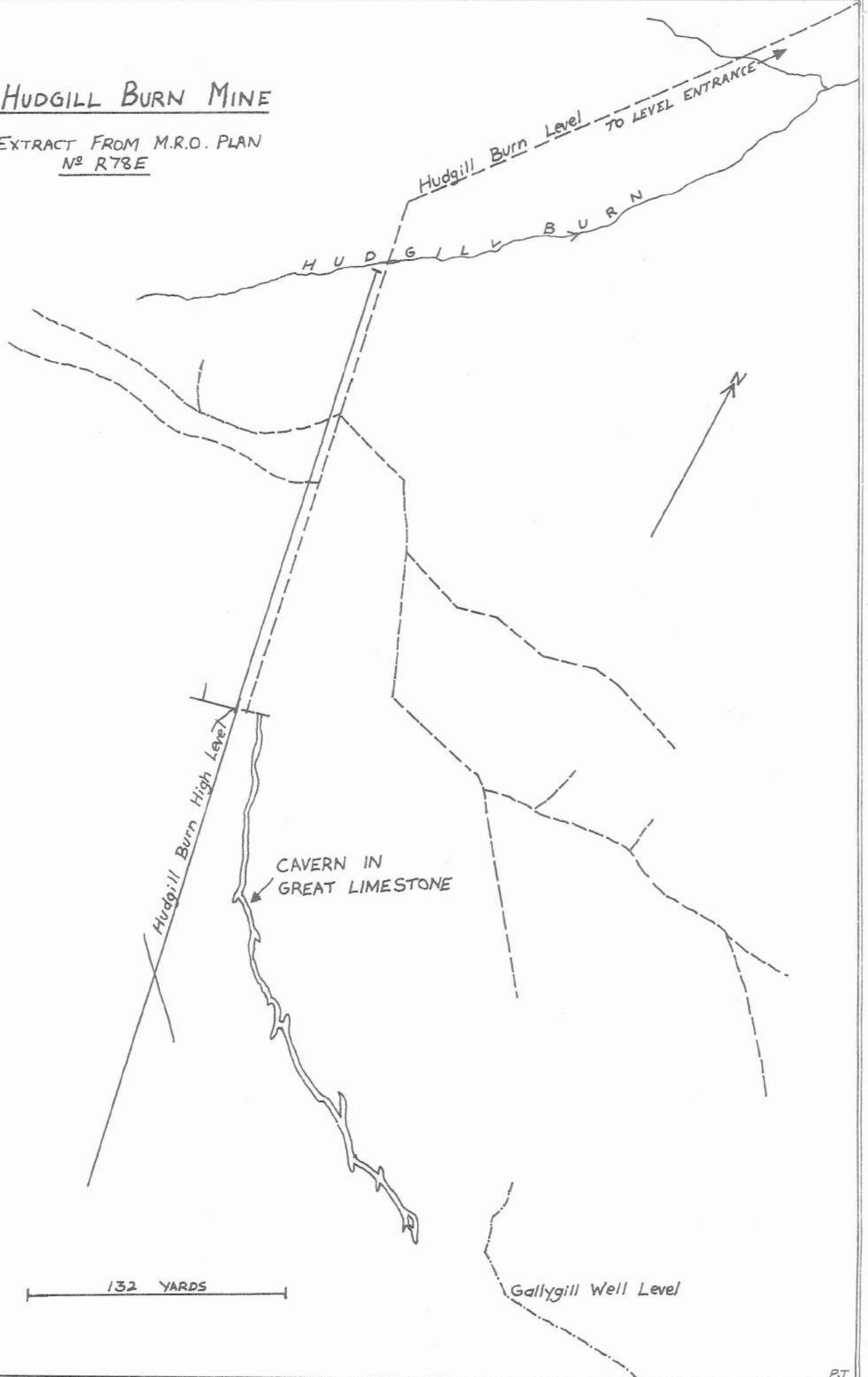
A plan of the mine is available (7) which appears to be a copy of an original in private hands at Alston. The attached illustration shows the part of the plan depicting the cavern, which is about 330 yards in length, and about at the previously quoted position from the level entrance.

References

1. Wallace.W. 1890. Alston Moor, its Pastoral people, its Mines and Miners. Newcastle.
2. Wall.W. 1904. The Alston Mines. Trans. Inst. Mining Eng. vol xxiv p 392
3. Dunham.K.C. 1943. Geology of the Northern Pennine Orefield, Volume 1. London, HMSO.
4. Wallace.W. 1861. The Laws which regulate the deposition of lead ore in veins; illustrated by an examination of the geological structure of the mining districts of Alston Moor. London.
5. Sopwith.T. 1833. An account of the Mining Districts of Alston Moor, Weardale and Teesdale in Cumberland and Durham. Alnwick.
6. Anon. 1822. A Few Notes on a Subterraneous Excursion into a lead and silver mine, in the parish of Alston, in the County of Cumberland. Phil. Mag. Vol 59. (Reproduced in Memoirs NMRS 1969)
7. Hudgill Burn Lead Mine. Plan R78E, Mining Records Office, Health & Safety Executive, 1 Chepstow Place, London WC2.

HUDGILL BURN MINE

EXTRACT FROM M.R.O. PLAN
Nº R78E



The Exploration of Ayleburn Pot.

Steve Torran

(Ed.note - prior to the recent extension, Ayleburn Pot merely comprised a rift in the stream bank above the sinks, dropping to a junction with a stream in a low bedding. Upstream is impassably small but a dry oxbow leads into a short downstream crawl, extended for a few yards by the Errington brothers.)

On Sunday 14th August 1977, Steve Torran and David Botton from Rothbury travelled to Ayleburn, to provide David with an introduction to caving. This was in the form of a trip down the Ayleburn Mine Cave. In the vicinity of the squeeze David, although highly competent, decided that caving wasn't for him, and Steve accompanied him back to the climb down into the mine level, from which he returned to daylight. Meanwhile Steve returned to the squeeze, and continued to the sump. After his quick solo trip Steve emerged enthusing about the mine cave, and decided to have a quick look at Ayleburn Pot, while David sat in the sun on the surface and took some photos.

Removing the corrugated iron from the entrance, Steve dropped into the rift leading down to the stream, which was quite low. He investigated the small dry passage which leads to the streamway a few yards further downstream. After a lot of aqueous gravel shovelling in the flat out bedding downstream he reached a point where not even a helmet could be inserted, and turned round. On the way back upstream he noticed a dry passage leading off. At the mouth of it was a pile of gravel from someone's previous excavation on their way downstream.

He could not remember any mention of the dry passage in the guidebook so he decided to have a look. A thin film of calcite on the smooth mud indicated that the passage had not been entered before. A crawl around an acute bend led to a false floor occupying half the passage (still intact at the time of writing, but delicate!). Squeering past this, he continued through a crawl with small grey and white stals. This led to a junction with two dry passages leading off and a 2 metre deep hole in the floor with the stream trickling at the bottom. Realising that this could lead to the Ayleburn Mine Cave, he dropped into the stream, and continued downstream in a hands-and-knees crawl, to a point where the stream turned r. into a low wet bedding. Being a self confessed aquaphile he squeezed into this, and proceeded to shove gravel out of the way. However, things became tough when only the nose and one eye remained above the water, and he decided that this was not the sort of thing to do alone. Retreating from the bedding, he decided to have a quick look along the dry continuation of the passage. A short climb up onto a chockstone led into a confused area of breakdown passage. Deciding to go out, a crawl around a couple of bends was found to lead back to the junction with the hole in the floor to the stream. Vowing to return with reinforcements, the party headed home to Rothbury.

A short discussion with Pete Ryder and Graham Stevens at the BCRA Conference revealed that the passages were indeed new. Chris Fuller and Steve Tarran decided to explore and survey the extension as soon as possible.

On Daturday 17th September Chris and Steve arrived at Ayleburn armed with surveying gear. However, the amount of passage explored meant that in the end there was very little time to do any surveying. It was found that the other dry crawl leading from Holes Junction subdivided into two sizeable passages, connected by a rift. The left hand branch led to a choked entrance through which daylight streamed, and Ayleburn could be heard outside.

We wasted a lot of time trying to squeeze through a tight bedding into a chamber, but later it was found that this chamber was in fact part of the other dry passage leading from Holes Junction, and there was no need to force the squeeze. Continuing along the latter passage, Chris reached an area of severe breakdown, with huge blocks lying at all angles. Many alternative ways through were noted, and a squeeze down between blocks led into a more solid series of passages with a lot of iron staining on the floor.

Two small passages on the l. were noted. Steve chose the first one, which proved to be too tight, while Chris crawled through the second into a series of straight high rifts, either side of large blocks, where the stream could be heard below. One long straight rift continued to a nasty spiky upward squeeze, which was left for another day, and another hole down to the stream was found. Here the stream emerged from a very low section, later identified as the bedding which had stopped Steve on the previous trip.

Chris acted as lifeguard while Steve tried to push the downstream end of the newest bit of streamway. This consisted of a wet bedding beyond some huge boulders, and was even wetter than the other sections. Steve managed to get some 3 metres into it, but was stopped by its tightness. It was found on a later trip that the presumed other end of this bedding, the upstream end of the Mine Cave, seemed to be sumped, although there were possibilities of lowering the water level if enough gravel were removed.

Returning to the top of the second hole into the stream, Steve found a muddy slope and short squeeze leading back to the chockstone which was noticed on the first trip. This confirms the amazing complexity and compactness of the cave. It was decided to survey the various sections of streamway and the dry passages which provided the shortest route between them. We surveyed to BCRA grade 4 rather than grade 5, as the amount of mud around made reading the instruments rather difficult in the small awkward passages. We finally emerged after about six hours in the Pot, with mixed feelings about the place.

It wasn't until Saturday 15th October that we returned. We were determined to finish the system, and the surveying went very well. The awkward upward squeeze in the straight rift was passed by Steve, but it ended 6 metres further on. An aven above the second hole to the stream was explored - it must be close to the surface, but no light comes in. When we had completed the underground surveying, we did a surface traverse from the choked entrance to the Ayleburn Pot shakehole, to close the loop. Drawing up the survey showed that the closed loop errors were small.

There is a distinct possibility that connections will be found between Ayleburn Pot and Ayleburn Caves or the Ayleburn Mine Cave.

(Ed.note - the Errington brothers have recently visited the new extension to the Pot, which takes the total length of the system to 665', and opened up the choked entrance referred to above. This is on the north bank of the Burn a few yards above Ayleburn Cave II, just beyond a fence, and about 15' above stream level. This means that the relatively dry and well decorated new passages can be visited without the initial wallow in the stream necessitated by the "old" Ayleburn Pot entrance higher up the valley side).

AYLEBURN CAVES and AYLEBURN POT

Alston, Cumbria

NGR NY 730499.

Ayleburn Cave 1. L. 120'

survey J. Cooper, P. Ryder, L. Worth 19.4.69.

Ayleburn Cave 2. L. 160'

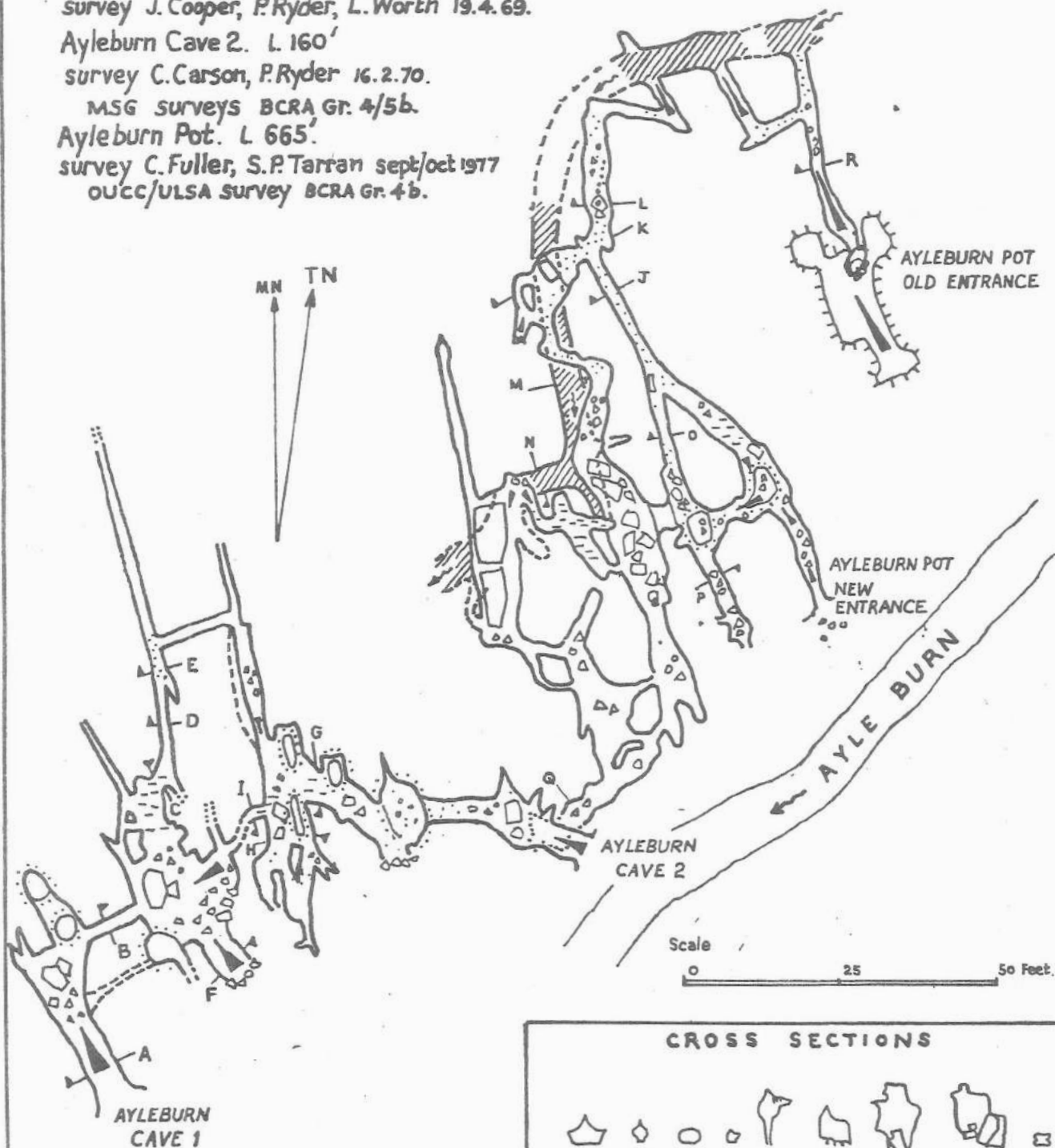
survey C. Carson, P. Ryder 16.2.70.

MSG surveys BCRA Gr. 4/5b.

Ayleburn Pot. L. 665'

survey C. Fuller, S. P. Tarran sept/oct 1977

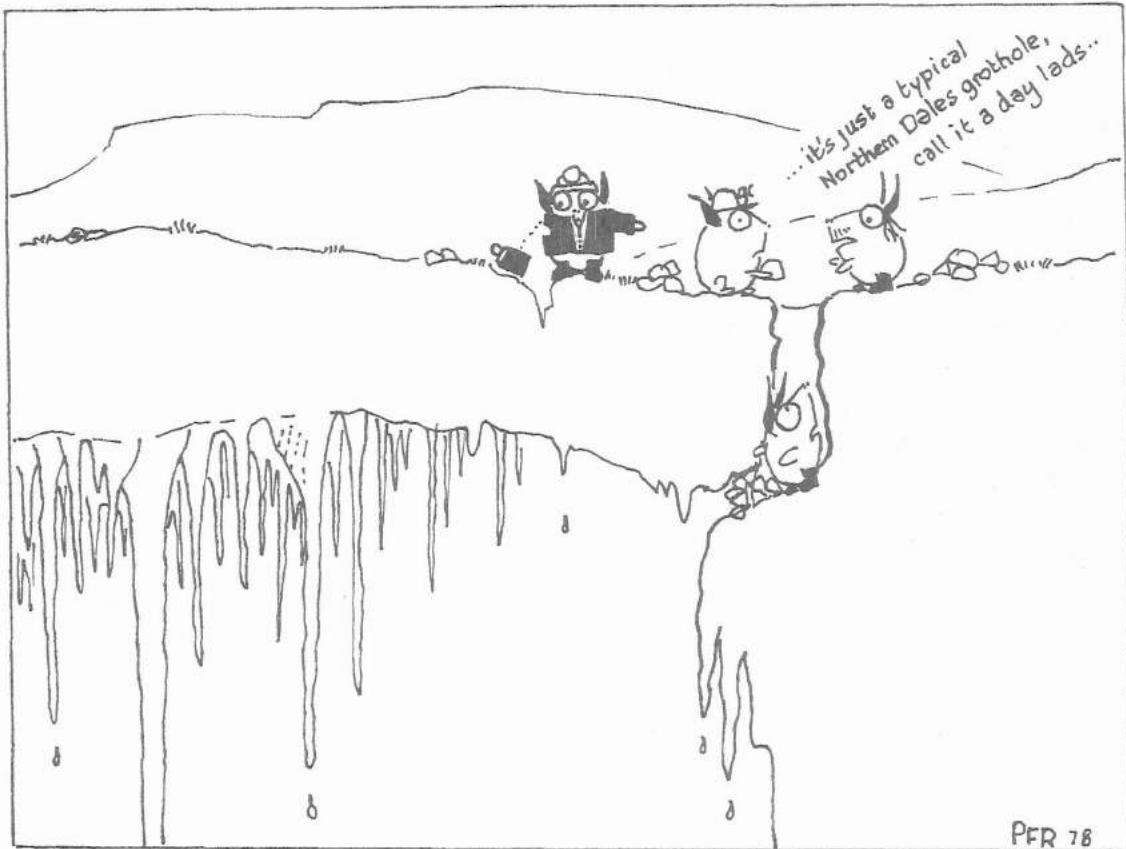
OUCC/ULSA survey BCRA Gr. 4b.



CROSS SECTIONS



PFR78



The Little Blind Moldywarp.

Once upon a time two little moldywarp decided, since it was snowing and an extremely cold day, that they would go and try and extend the downstream section of a very wet pothole. Upon arriving at their destination they put on their little wetsuits, helmets and lamps, and clambered underground. They descended dark rifts and scurried through tight little passages until they found the stream passage. One of the moldywarp jumped straight into the water and got his little body wet all over. His friend told him to stay out of the water, or "he would catch fistulous withers". However, undaunted, the little moldywarp gripped his knees together and, lying in the water, pushed his tiny body into the passage. He peered ahead, and saw that the passage was too small even for him, so he took off his helmet and used it to scoop up pebbles from the stream bed. Before long, he had dug a small trench along which he could crawl. His friend, waiting on the bankside, could only see his feet sticking up, and after a little while even they were lost to view, and all he could hear was a gentle "bloop bloop" noise coming from down stream.

The little moldywarp eventually noticed that just above him was an open rift. He turned his head and looked into it, and shone his light to both ends, but it was a blind rift with no way on. He had been in the water for about two hours, and was starting to get cold and wet, so he returned to where his friend was sitting shivering on the bankside. They crawled out of the pothole and being very weary and disappointed at finding nothing they went and got drunk.

Unfortunately the little moldywarp had not explored the blind rift, which was not blind at all but led into 700' of cave passage. The rift was not blind, just the little moldywarp.

When they found out later, they cried.

taken from Tales of Ayleburn
by Great Uncle Mole.

K.B.E.

RATE YOURSELF AS A CAVER

Are you a super-caver? Now's your chance to find out. Answer the questions below with complete honesty, add up your score and read your personalised assessment at the end of this article.

- 1 How frequently do you go underground? (a) every week at least, (b) every few weeks, (c) occasionally, (d) once was enough.
- 2 Your caving clothes consist of; (a) last year's spring collection, (b) a boiler suit, (c) a wet suit plus 'b' and/or 'a'.
- 3 With which caving club(s) are you associated? (a) none, (b) your local or university club, (c) MSG, (d) personal member of BCRA.
- 4 Which form(s) of caving light do you possess? (a) candle, (b) torch, (c) carbide lamp, (d) rechargeable cell, (e) nuclear powered electrical system with quartz-iodine bulbs and helium-neon surveying laser.
- 5 Have you ever had to be rescued from a cave? (a) yes, (b) no, (c) yes please as soon as possible.
- 6 What is your reaction on finding a hitherto unknown hole in the ground? (a) carefully avoid falling in and write to the council, (b) tell a caving friend and suggest that he explores it, (c) enter it immediately and refuse to leave until every inch has been surveyed.
- 7 When you emerge from a cave are you usually (a) calculating the total length of new passage you have found, (b) enjoying a sense of happy exhaustion, (c) wishing the stretcher bearers were more gentle ?
- 8 Roll up your trouser legs and inspect your knees; are they (a) clean and pink, (b) slightly battered, (c) rather dirty and bruised, (d) cut and scarred with embedded particles of limestone?
9. Imagine that you are proceeding through a dry cave when you come to a section with water half way to the roof. Do you (a) express surprise at finding water in a cave, (b) continue, hardly noticing the icy wet sensations in the legs, (c) continue reluctantly, (d) turn back reluctantly
- 10 The roof now approaches within 2" of the water surface, do you (a) turn back, (b) send someone else in front, (c) continue confidently, (d) panic ?
- 11 Are you a regular subscriber to this journal? (a) yes, (b) no, (c) will be from now on, (d) not fooled by the implication that the journal is regular.
- 12 Where do you keep your caving gear? (a) borrow it from friends when (if ever) needed, (b) at the back of the cellar/shed/attic, (c) by the door ready for immediate use, (d) I'm wearing it!
- 13 What do you think the term "phreatic" describes? (a) storage space for caving gear at the top of a house, (b) cave formation below the water table (c) a device used for descending potholes , (d) an affliction of the knees resulting from prolonged contact with cave floors.
- 14 In which of these liquids do you most often bathe? (a) asses milk, (b) hot soap solution, (c) the cold water of a stream, (d) tepid mud.

- 15 How do you train for caving? (a) by diving under the soap rack in a full bath of cold water, (b) by squeezing through the smaller spaces in the structure of your furniture, (c) by reading caving books and journals and deciding not to go, (d) no time for practice since you are too busy in real caves.
- 16 when you think about unstable boulder ruckles do you (a) wonder what they are, (b) look forward to negotiating your next one, (c) check that you are properly insured, (d) shudder.
- 17 What technique would you normally use when faced with a 50' pitch? (a) a long run up and a medium-pace delivery, (b) SRT, (c) retreat, (d) ladder and lifeline.
- 18 Imagine you are in a cave filled with gleaming white stalactites. Do you (a) break some off to take home, (b) admire without touching, (c) climb them, (d) take photographs.

Now add up your score using the table below:

Question	a	b	c	d	e	Question	a	b	c	d	e
1	5	3	1	0		2	1	3	5		
3	0	3	5	6		4	1	2	4	5	9
5	1	2	5			6	1	2	5		
7	5	3	0			8	0	2	3	5	
9	0	5	4	2		10	2	2	5	0	
11	5	1	4	1		12	1	2	4	5	
13	2	5	2	2		14	1	2	4	5	
15	4	4	2	5		16	0	4	5	3	
17	-2	5	2	5		18	-5	4	-5	5	

Now read your personal rating:

- 70 and above - You rate as a True Caver; you are well equipped and unafraid of discomfort. Your main dangers are likely to be over-confidence and oversensitivity to daylight.
- 30 - 69 - You rate as a fair caver; you have some interest and experience with caving, tempered with a healthy respect for danger and discomfort. Perhaps your rating would improve if you read the right journals: subscribe for MSG-10 now!
- below 30 - You rate as an armchair caver; while you have some interest in the activity you rarely indulge. Perhaps you could benefit from some of the exercises described in question 15. Alternatively you could take up a less demanding hobby such as hang gliding or shark dentistry.

Peter R. Armstrong.

What is the MSG?

If, Dear Reader, after ploughing through this Journal you are perplexed in your mind as to what it is actually all about, and as to who or what produced it, a few facts:-

MSG came into being, as such, in autumn 1966, when a group of friends based on Darlington developed a penchant for visiting caves and old mines in the Northern Dales (i.e. Wensleydale and further north). The group grew, with interested people from further afield joining, and almost became a caving club - there were, briefly, subscriptions (but no-one paid them), and, even more briefly, a constitution (which was promptly lost). By 1970 the Group had settled to its present form, **which is:-**

A loose group of cavers interested predominantly in prospecting for, digging for, exploring and surveying new caves. New caves predominantly in the Northern Dales, but also elsewhere, especially in the 'little known' limestone areas, and where useful work remains to be done. Publishing the results of our exertions has always been a high priority - witness nine journals.

The MSG is now a deliberately disorganised and informal body. Individual members organise meets, and all keep in touch by contacting (by letter or 'phone) the Secretary (alias Central Intelligence Unit and Power Complex). Just to confuse matters, he (Graham Stevens) is currently residing in Spain, so at the moment his functions are carried on by two members,

Chris Langthorne, 17 Huntershaw Way, Longfield Lane,
Darlington, Tel. D'ton 58745.

Pete Ryder, 147 Heavygate Road, Crookes, Sheffield.
Tel. Sheffield 669388.

There is a Northern Dales Meet every month or so, or more frequently. Also Derbyshire pottering every few weeks. If you are interested in our style of caving activity (of which this Journal should give a fair taste) just contact the nearest or most convenient of the above two addresses.

One more function. If you are a non-club or non-clubbable speleologist, and have discovered a new cave in the Northern Dales, and would like somewhere to publish your find, we'd be happy to help.

PFR