

**The story of what happened at Mossdale
Caverns between Saturday 24th and
Wednesday 28th June 1967**

The Mossdale Tragedy 1967



Compiled by Mick Melvin

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In this introduction I have included the reasons why the British Speleological Association was drawn to the Area of Grassington Moor in 1939. I summarize early attempts to gain entry to the suspected Caverns by Bob Leakey and Eli Simpson. The arduous trips to the far end of the cave made by Mike Boon and Pete Livesey in 1963 are here in full, and the surveying of the known cave by members of the University of Leeds Speleological Association is covered.

THE MOSSDALE TRAGEDY 1967 by Mick Melvin

Introduction

As the fiftieth anniversary of the Mossdale tragedy approaches, many people felt that a definitive record of Britain's worst caving incident was required.

For that reason I have gathered together material from many sources and my approach has generated divergent versions of events. As with most historical problems it is seldom possible to achieve a clear-cut response.

The ambiguity that appears in some accounts is due to the significant passage of time since the tragedy. In what appear to be incompatible accounts of a single incident, every benefit of the doubt is given. This body of evidence will typically comprise what the primary sources; the people most involved in the rescue attempt, tell us about the disaster that occurred at Mossdale Caverns between 24th and 28th June 1967.

HISTORICAL BACKGROUND

The years between 1964 and 1967 were an exciting time to be a caver in the north of England. During this period the Kingsdale Master Cave was discovered by the University of Leeds Speleological Association (ULSA). The Happy Wanderers extended Dale Barn Cave and Skirwith Cave, and Gingling Hole was extended by the Northern Pennine Club. After many hours in Langstroth Cave, cavers from a number of different clubs working together scaled the waterfall beyond the sumps, giving access into what became Langstroth Pot.

In Mossdale Caverns, two members of the Bradford Pothole Club, Mike Boon and Pete Livesey, reached the end of the known cave, last visited twenty years previously by Bob Leakey. Their trip renewed interest in Mossdale and the potential for an extensive cave system beyond.

Caving Equipment 1960s

The start of the 1960s saw the end of rope ladders and hemp rope lifelines. This heavy equipment was being replaced with nylon ropes, electron ladders and compact wire rope belays. Electron ladders had been in use for some time with a few caving clubs, but in the 1950s most clubs were still using wooden rungs on rope ladders.

During the early 1960s, nearly all caving clubs made their own ladders from Duralumin tube and wire rope. Neoprene wetsuits appeared on the caving scene; these too were mostly homemade using brown paper patterns and taped seams to keep them in one piece.

Accumulator lamps strapped to your waist were replacing acetylene lamps, although in certain caves many preferred an acetylene lamp and a tin of carbide. Wellingtons began replacing boots as chosen footwear as they kept your feet dry for longer. Many cavers could now afford transport, mainly a motorbike. A good network of club hostels known as dumps, offered good facilities for a small fee regardless of whether you were a club member or not.

For the most part, cavers, or potholers as they were referred to in Yorkshire and Lancashire, were content to don their gear and descend the abundance of caves in the northern Pennines with the objective of ‘bottoming’ the cave and returning to the surface. On the other hand, there were many more cavers, for whom the appeal of caving was to dig, dive or blast, either in existing known caves or on the fells, with the intention of discovering unknown passages or previously undiscovered caves. These cavers can truly be called Cave Explorers. The six cavers who lost their lives in Mossdale Caverns in 1967 were unquestionably amongst the second group.

On Saturday 24th June 1967 at two o’clock in the afternoon, a group of ten cavers, eight men and two women entered Mossdale Caverns near Grassington. They split into two separate groups before going into the cave. The first group into the cave comprised of Dave Adamson, Geoff Boireau, Bill Frakes, John Ogden, Michael Ryan and Colin Vickers, with the intention of going to the extreme end of the known cave and to use explosives to remove a blockage that had prevented further progress for a number of years.

The second group, Jim Cunningham, Morag Forbes, John Shepherd, and Collette Lord, intended only to go as far as Rough Chamber, an underground journey taking about forty minutes, and then return to the surface.

The second group completed their trip safely and exited the cave at five o’clock. By late afternoon weather conditions outside the cave had deteriorated quickly to thunderstorms, and heavy rain began to fall. The six cavers, who had gone to the far end of the cave and by now on their way out, were overtaken by a deluge of water which had flooded the cave as a result of the torrential rain falling on the fells above. Due to the quick thinking of Morag Forbes Dave Adamson’s fiancée, a major rescue attempt was set in motion by The Upper Wharfedale Fell Rescue Association. The story recounted below describes the subsequent rescue attempt through the voices of the people who took part in it.

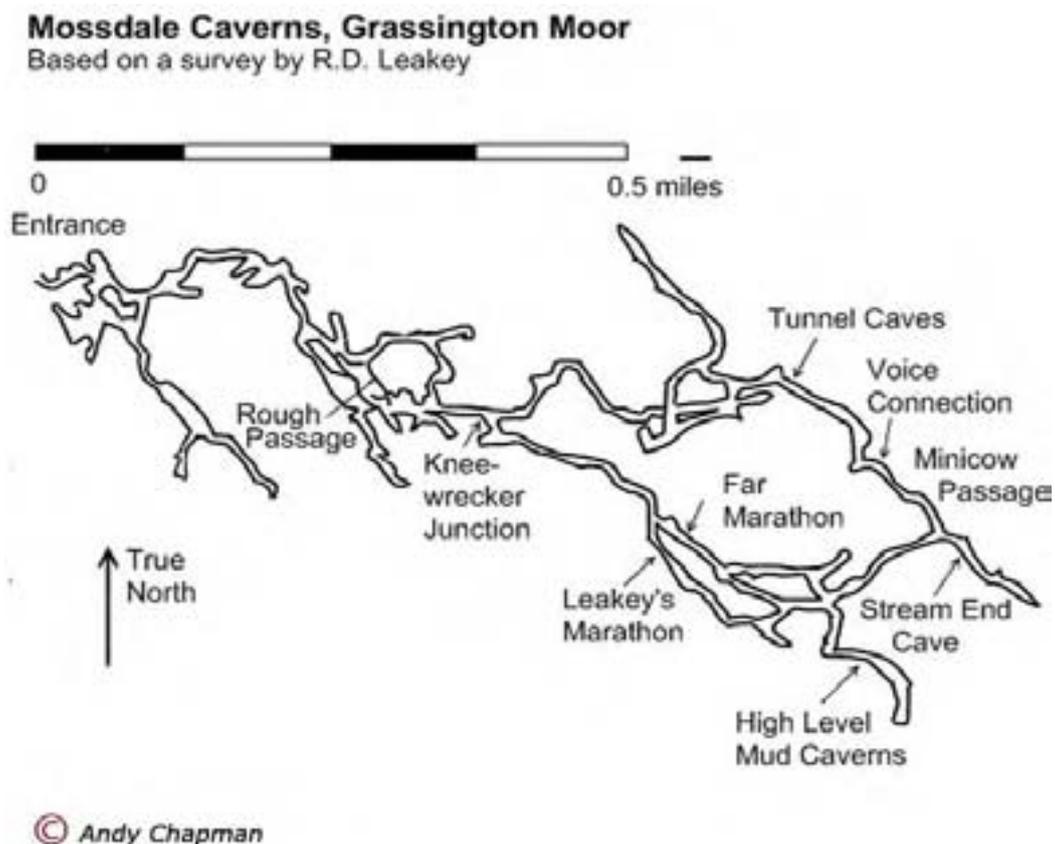
THE MOSSDALE TRAGEDY

In the fifty years that have passed since the Mossdale tragedy, many words have been written about it in newspapers, journals, and books. In this piece, I have brought together an assemblage of voices to describe the events that led up to the Mossdale Caverns disaster and what took place at the cave during the days of 24th to 28th June 1967. I have included an account of the ensuing efforts which were made by the caving establishment to have the

cave re-opened. It was proposed that in order to facilitate any future rescue attempt at the cave, the dam and Mossdale Beck diversion channel, which proved so successful during the 1967 rescue attempt be reinstated. Well informed individuals speculated; if this was done it would help prevent a repeat of the 1967 tragedy.

The entrance to Mossdale Caverns (NGR: SE 01628 69744) lies at the base of Mossdale Scar; an imposing crag attaining an altitude of 1400 ft. The crag stands in a shallow hanging valley walled by a steep grassy ridge on the south rising up to Grassington Moor, and a lofty fell on the north side, which extends beyond Conistone Moor to the summit of Great Wherside.

Mossdale beck; which here has the proportions of a small river, sinks completely at the foot of the crag and is not seen again above ground until it emerges, together with the water from Langcliffe Pot, at the major resurgence of Black Keld (NGR: SD 97435 70984) on the east bank of the River Wharfe in the valley 750 feet below. The cave is approximately three miles from the village of Conistone in Upper Wharfedale; it is reached from there by a gated Landrover track (Bycliffe Road) used by shooting parties for many years. There is also a pleasant walk from Conistone which follows the valley of Conistone Dib before joining the Bycliffe Road after just less than a mile. Many people now prefer to approach the cave from Yarnbury where there is good parking. The walk is an easy upland stroll of three miles.



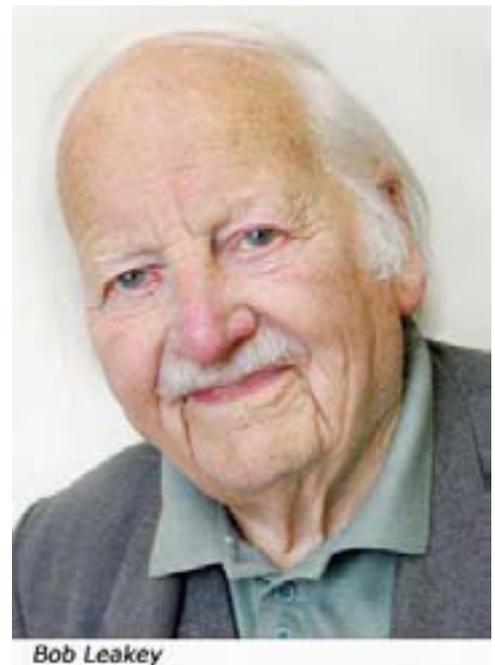
THE DISCOVERY OF MOSSDALE CAVERNS

The early exploration of Mossdale Caverns began due to the initiative of one man coupled with the strength and endurance of another.

One of these men was the notoriously abrupt but relentless Eli Simpson known as Cymmie, and the other a young aircraft engineer with a very strong sense of adventure and stamina called Robert Dove Leakey, always referred to as Bob.

During the late 1930s, Cymmie, a founder member of the British Speleological Association, gathered together a large number of early geological records and old mine plans covering the area between Hebden Gill and north towards Bycliffe Hill. His interest in these documents was driven by his belief that the answer to the last major unsolved speleological problem of the Yorkshire Dales; the Mossdale Beck Grassington Moor- Black Keld resurgence enigma, could be found in the abandoned lead mines of Grassington Moor. He was convinced that the longest and deepest cave system in the British Isles lay beneath the Moor.

In 1937 Cymmie put in a great deal of time and effort in investigating the area, both on foot and at his desk, and by the end of 1940 he was confident that his efforts would lead to the discovery of an extensive cave system and possibly the deepest cave in Britain. His first attempt to find the postulated caverns was concentrated near to the village of Grassington. His interest was focused on two large resurgences near the village; Grassington Low Mill by the river Wharfe and Braith Gill 1/4 mile south-east of Ghaistrill's Strid. When that approach proved to be unsuccessful he turned his attention to the deserted mine shafts on Grassington Moor. Cymmie had heard the story told by the old lead miners, of a large cavern discovered by 'T'owd Man' under Grassington Moor. He had the notion that if he could locate this lost cavern, it might provide a way into the cave system he believed lay underneath the Moor.



About this time Cymmie enlisted Bob Leakey to aid him in his search. Together they began to systematically explore the mine shafts and accessible levels that lie between Yarnbury and further away across the moor to Peru and Turf Pits Mines. For completeness, they explored and surveyed all the drainage levels that poured into Hebden Gill. Once more this method produced no results and finally Cymmie turn his attention to the large stream that disappeared at the base of Mossdale Scar.

The date was late April 1941, when Bob Leakey began his search for a way into the caverns he believed lay beyond the jumble of fallen boulders at the foot of Mossdale Scar. He commenced his search where the large stream of Mossdale Beck disappeared beneath the forbidding Scar. Due to the ongoing war, there weren't many fit young men around to assist him; accordingly, Bob enlisted some of the young girls who worked with him at the aircraft factory in Yeadon. On May 31st, 1941 searching for his pipe which had fallen from his mouth into the ruckle of boulders beneath Mossdale Scar, Bob found the way into the stream passage beyond the scar. Within a short distance Bob dropped down a narrow fissure into a pool of water which to make further progress he was forced to duck beneath, because of this he named the entrance 'The Lavatory Basin'.

By the end of 1941 Bob Leakey, together with his team of Women were joined by Lewis Railton. In a few months they had explored almost four miles of cave passage beneath Grassington Moor. The survey of the Mossdale Caverns was completed after many long arduous trips into the cave, some lasting several hours. In order to expedite the surveying and avoid the necessity of making the long laborious trip to and from the entrance, Bob would sometimes visit a dryer part of the cave; once there he would cover himself with sand and go to sleep.

Leakey came to the conclusion that the only possible resurgence for the Mossdale Caverns stream was the Black Keld resurgence 750 feet below in the valley near Kettlewell. But his newly completed survey proved that the cave was heading in the totally opposite direction, towards Hebden Gill and the Grimwith drainage area.

The complete story of the early exploration of Mossdale Caverns is told in: (R.D.Leakey pp 7-18 The Caverns of Mossdale Scar, Wharfedale, Yorkshire. Cave Science No 1 June 1947) held by <http://caving-library.org.uk>

Bob Leakey tells how he discovered Mossdale Caverns

1940; I had a car, nobody else had. We went up to Mossdale area because there were one or two caves there that nobody seemed to have any record of and we were exploring them. It was a case that nobody could get into that hillside at all, water just disappeared. I eventually found a bit of a sump there down the bottom, it was a drier area just big enough for somebody to crawl through.

I had practiced holding my breath for as long as I could counting up to 79, 80, 90 a hundred and so on. I used to have this very strict system that I could just go one third of how much breath I could hold, and then I had to turn around which sometimes took a whole third, another third and then get out as quick as I could. I started that system on Mossdale and I only needed to do about two dives in like that, and I managed to push enough rock away from the far end and let the water out.

I went down sometimes on a Saturday night and two other nights at least, sleeping in the cave because there was some fairly dry sand, and if you scraped yourself a hole in there and laid well down in the hole and covered yourself up, you could sleep quite comfortably for a few hours at night and then carry on next day you see.

Did you see much evidence in there of flooding?

Yes, I think the second trip I suddenly noticed puddles on the floor slowly getting a bit bigger and suddenly I met the water coming up towards me you see. So I had to sort of scramble like hell to get out, and I began to sense there was a sense of danger. From then onwards none of the other people would come with me and all the exploring I did was more or less on my own.

Were you ever afraid?

Not particularly, by then I was beginning to know how to handle fear. The fact that it's there like Mount Everest means that it has got to be explored. There's that thrill of being frightened it's rather like the first time you take a flight into the air and overcome your fear and land safely, that the sort of joy that you get, gives you the real kick in life.

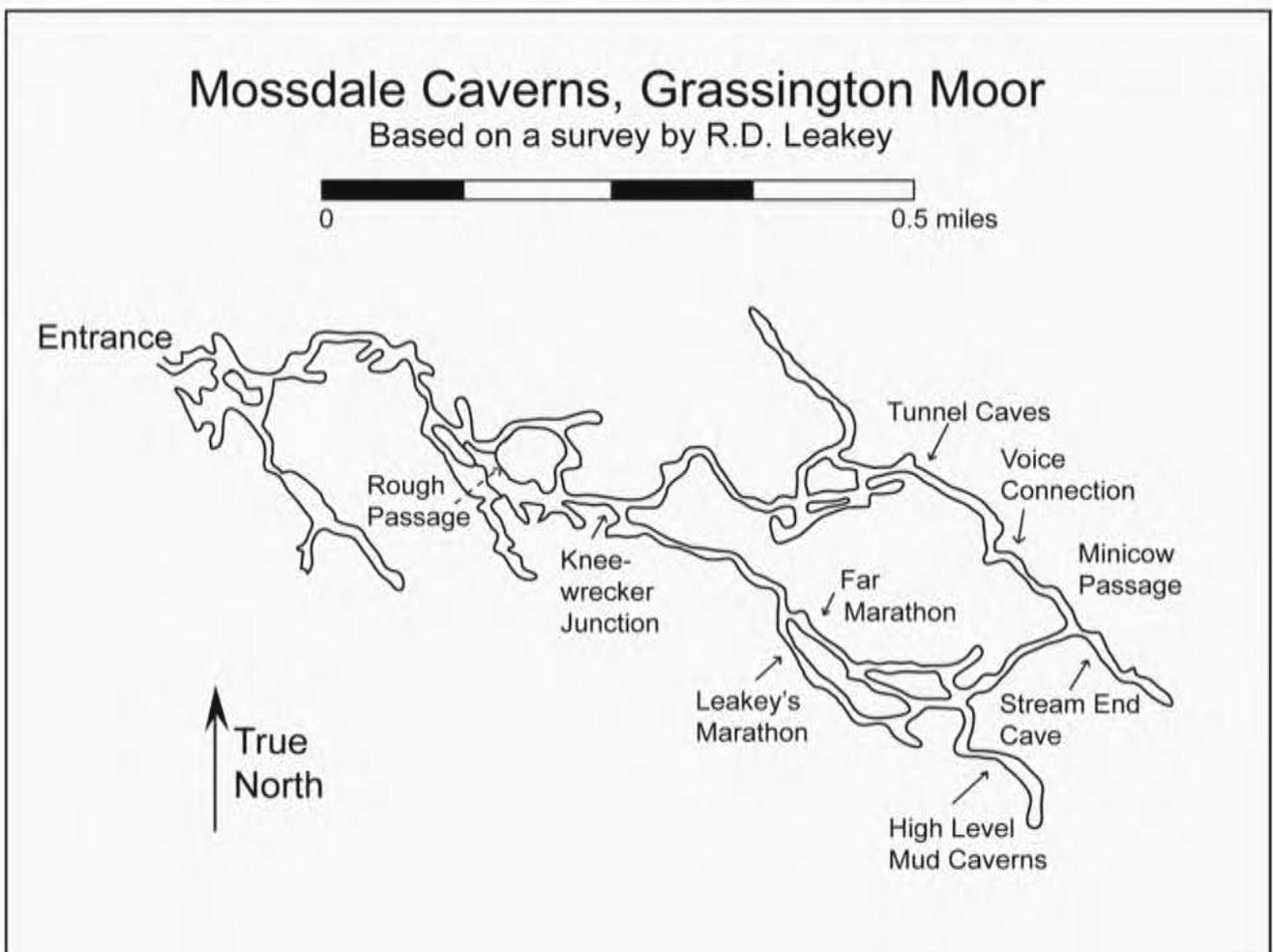
Ray Kershaw 'In Living Memory Mossdale Caves' BBC4 19th March 2008

Robert Dove Leakey died aged 98 on the 22nd April 2013



The Caverns of Mossdale Scar by Mike Boon

Mossdale. For twenty years the mere mention of the word was enough to make the potholer shudder with horror and order another pint. It raised visions of endless jagged crawls, icy canals, froth-coated sumps. Half the time the entrance was under water. The other half it was blocked. It was the most arduous cave in Britain, demanding almost superhuman endurance, while the water rose 700 feet below, making it potentially the deepest cave in Britain. The legend derived not only from the cave but also from its discoverer, R.D. Leakey. Leakey possessed qualities of physical strength, resistance to cold and willpower that made him quite outstanding. Much of his exploration in Mossdale was solo for the reason that few of his contemporaries approached him in physical endurance. As time went on the difficulties of the cave and Leakey's phenomenal performances grew more and more closely linked and the legend was born. And even Leakey had only reached the end of the cave once.



Mosssdale Beck rises on the southern flanks of Great Whernside above the 2,000 foot contour. It flows south, parallel to Wharfedale for approximately four miles before sinking at Mosssdale Scar as probably the largest high-level sink in Yorkshire. Its valley is wild, grim, dark. The scar is an inset of elephant grey limestone on the slopes of Black Edge. Well over one hundred feet long and up to fifty feet high, the rock is shattered by frost and flood and every winter sees a new section of the face peel away to litter the scar foot with sharp-edged blocks. The stream runs over a shingle embankment beneath the scar and disappears into a deep pool hollowed out of mud and boulders. The site of the sink changes from year to year and in times of flood a broad torrent roars underground the whole length of the scar. Below the sink the valley broadens and a large stream flows down the far fell to cross the valley floor and sink in a series of muddy depressions. It is not met in Mosssdale Caverns and may enter an unknown system. In the middle course of the stream is Swarthgill Hole, 2,000 feet of sharp wet passages. By the track is Swarthgill Level, a disused lead mine now beautifully decorated with colourful calcite formations. Further down, the valley acquires another stream which sinks above Gill House Farm. Below the farm is Gill House Pot, a fifty-foot shaft which appeared one night just after the war. Lower still, the valley broadens out onto Grassington Moor, with its old shafts, disused chimneys, and dams. Lead, zinc and calamine were mined here. Now the last smelting house at Yarnbury has been closed.

In the summer of 1940 Bob Leakey and his friends were trying all the lead-mine shafts they could find on Grassington Moor. This was at the urging of Eli Simpson, who had unearthed a reference to a lost cavern found by the old miners. Leakey's band descended many a crumbling shaft, but without success; the lost cavern remained lost. One day by way of a change the party wandered up to Mosssdale Scar. They poked about in the crevices at the foot of the scar but there seemed to be no way in. Then Bob dropped his pipe into a crack. He started to pull out boulders and soon had retrieved his pipe and also found an inviting hole. Dropping into it, he found a U-bend mostly full of very cold water-The Lavatory Basin. Beyond, a way through loose boulders led towards the sound of the stream.

In the weeks that followed the three girls in his party were induced to brave the horrors of the Basin. The party explored as far as Assembly Hall, a large flat-roofed cavern where they met the beck, then downstream to a wide pool of peaty water. Bob plunged through the sump and by kicking out boulders and gravel holding back the water, managed to create an airspace all the way through. The ladies were tied onto a length of rope and pulled through, while Ken Gray held the other end. More river cave led to the second Drown or Glory, dealt with in a similar way. The explorers found a magnificent stretch of river cave leading to three more intricate ways forward which joined at Rough Chamber where the main stream passage seemed to end. Tucked away behind a sill of rock was the way on, a hands and knees crawl which quickly earned the name of Rough Passage. On a later trip Bob, Ken, and others pushed on past Kneewrecker Junction, 600 feet from the start of Rough Passage. Jean Wright, one of Bob's climbing companions was sent down the then unexplored Near Marathon Passage. Bob's party returned from the mighty caverns of Kneewrecker Series to find no sign of Jean. Setting off down the crawl Bob found her well down Near Marathon, stuck. After a great deal of manoeuvring, he managed to pass her and help her turn round. Then the long crawl out began, with Jean's lower attire somewhat lacking.

After this episode Bob pushed Marathon on his own and on his next visit explored to the bitter end, entering the large caves beyond. Dog-tired after a day's work and the drive up from Manchester he did not explore the streamway but climbed up into the High Level Mud Caverns, covered himself with sand and went to sleep. He awoke to find he had left his torch on and the batteries were flat. Getting his only spares out, he left in some haste. After this venture, Eli Simpson became convinced that this was the master system in Yorkshire and recruited Lewis Railton for a second expedition. Lewis and Bob explored to the boulder choke terminating Stream End Caverns and surveyed back to the end of Far Marathon. After this trip enthusiasm waned. A large inlet entering Stream End Caverns remained unexplored, as did the northerly branch of the High Level Mud Caverns. The southern branch of the Caverns was explored for 600 feet or so on Bob's first visit but continued beyond this point.

In the early summer of 1960 I was working at Threshfield Quarry near Grassington. The quarrymen took a great interest in the local caves and I learned that some of the Leeds University lads would be down Mossdale one weekend. On a beautiful June evening I walked up to the Scar where I found a couple of the Leeds cavers pitching camp. On Sunday they were surveying in Kneewrecker and Marathon as part of a project to map the whole cavern accurately. At the pub in Grassington I met the rest of the party, including Barry Greenwood and Malcolm Budd, and on Friday night, I took my tent up to the Scar. Barry said we should go down on Saturday evening. We were cooking before the trip when two strangers walked into camp. One was heavily-built and soft-spoken, his rimless spectacles giving him a faint air of Billy Bunter. By contrast, his companion was a small, frail looking lad of seventeen or so. The pair were Ken Pearce, one of the explorers of Giant's Hole in Derbyshire and a man with a big reputation in caving, and Bobby Toogood his apprentice.



Ken said they would prefer to come in with us and asked if the trip could be postponed to the early hours to allow them a few hours sleep. At about 2 a.m. they appeared again and I decided to join them rather than join the survey party. Ken was keen to visit Kneewrecker in search of a mysterious hole which Bob Leakey had told him about. In the floor of one of the passages, there was apparently an opening at the bottom of which a powerful stream could be seen. Leakey, on his own and without a rope, had not gone down when he first found it and had never returned to the spot. In the first light of dawn, we slid into a shadowy opening at the upstream end of the Scar. A series of indefinite gaps between black boulders led downwards; every crack and crevice was filled with tussocks and peat-sods washed in by floods. The cave was a mass of razor-edged blocks through which we dropped steeply following a ragged telephone wire. After ten minutes we reached more solid going, massive benches of rock twenty or thirty feet broad. Some complex route-finding brought us to a wide flat-roofed cavern with a large clear stream, Assembly Hall.

An hour or so from the entrance we came to a fair-sized opening above the stream, Rough Chamber. We left the stream and dropped into a low shingle-floored passage at the back of the chamber. This was Rough Passage, the same size and shape as a large dog kennel and 600 feet long. It was exactly the right size for hands and knees crawling and we rattled along at a good pace. At one point was a jammed boulder which we had to squeeze under, followed by a crawl on one side in a wet tunnel. This broke into the side of a wider passage with a stream dropping over a ragged fall into an attractive black pool. The stream ran down a gentle incline of peat-stained sandstone in which it had worn perfectly smooth channels a few inches deep. This going, the greater part of the oddly named Rough Passage, runs for several hundred feet. Here the cave stream has cut down to the layer of Dirt Pot Grit underlying one of the beds of limestone and this has halted its vertical penetration. Although the passage was generally dark, a film of water on walls and floor picked up our lights and made progress quite cheerful. Nowhere could we rise from our hands and knees.

At Kneewrecker Junction, where Near Marathon Passage forks off to the right, we continued with the stream down Kneewrecker Passage. Packed nose to tail we crawled on, the rear of the man in front and the rising steam making it impossible to see ahead. You took the obstacles as they came, a tight drag on one side through a diminutive fissure, hands and knees work over an armoury of rock spikes, a series of right angle bends where you could half stoop for a few feet. In half an hour we reached the main passage of Kneewrecker, a flat-roofed cavern floored with black boulders. Here we left the surveyors and began our search for the mysterious hole in the floor. Downstream, to the right, took us past several junctions with choked passages until the passage enlarged and a wall of rock abruptly blocked the way ahead. This was Four Ways Chamber, where four passages met. We found a small hole in the base of the wall ahead and were soon crawling downstream in a passage similar to Kneewrecker. The rock was solid, the stream clear and merry, altogether an attractive passage. After 600 feet of crawling the passage grew suddenly tight just before a pool of water which curved out of sight. I tried to get through without success; shouting gave back a chill watery echo indicating the passage sumped. Ken was not satisfied. With the air of a conjuror producing a rabbit from a hat he instructed Bobby to crawl in. But Bobby kicked and struggled in vain; it was too tight.

At Four Ways once more we tried the right hand passage looking downstream. It climbed steeply and then shot straight up as a muddy rift. At the top, we found a large gloomy cavern floored with grey peat mud and boulders. It closed to the left but to the right Ken followed it to a pitch into the stream passage below. I followed a small passage on one side to a similar connection and the Leeds lads surveying below were surprised to see lights sprouting out of the roof. We returned to Four Ways and took the passage opposite, the last way out. A large round roofed passage led upwards then turned sharp right. We clambered along a rift cut deep in the passage before the cave bore left as a series of mud-cemented boulder slopes. We carried on for hundreds of feet, sometimes stooping, sometimes crawling; the passage seemed endless. Then I heard running water ahead. The others were sceptical at first but within a few yards there was no doubt. We raced on and soon reached the head of a tight drop emitting the sound of water. Hastily stuffing a ladder into it I tried to climb down but it was hopelessly tight. I tried another much larger gap but again couldn't get through. Ken said one word: "Bobby!"

Bobby dutifully slotted himself into the gap but he couldn't make it either. He came out and climbed over the hole into the continuation of the main passage and in a few seconds we heard his excited shout; there was a second hole with the clear sound of running water below. The lost stream of Mossdale Scar! We slid down into a nasty little rift with a stream emerging from some boulders. The rift continued downstream but before pushing on we stopped for a cramped meal. Then we packed up and plunged into the unknown. We were stopped ten feet on by an impossible choke and disgustedly left the hole. Back in the main passage, Ken amused himself by opening up the first hole we had tried while I went to sleep. He was still at it when I woke up and I remarked that it probably led down to the bit of stream we had been in. Ken pondered this for a minute or so then said I should go down and find out. Warily I slid into the miserable rift, shone my light onto his boots and struggled out again.

There was nothing more to keep us. On the long trek out we explored several side passages to the left, mainly muddy crawls leading to chokes, but one led to a magnificent arched passage with a clean floor, Tunnel Caves perhaps. At Fourways Chamber we stopped for another meal, and by the time we had covered Kneewrecker and Rough Passage to reach Rough Chamber, I for one was very weary. We had very little light; two flat accumulators, one reasonable one, one fading torch. Route finding was not easy and when the torch died we had only one light between us. Then at Assembly Hall Bobby snagged the lead of his accumulator on a rock and broke it. His lamp was a different make to ours and we were faced with the prospect of sitting in the dark until someone came for us. Ken was equal to the occasion. He flashed his lamp, which had recovered slightly, for two or three seconds at a time while Bobby rushed along the telephone wire as far as possible. Ken and I would then close up to him. The way was complex and this process took a long time. "Couldn't we take our shirts off and burn them?" said Bobby. Our groping finally brought us to the entrance as the sun set.

A few weeks later I left for the South and it was not until 1963 that I once again found myself living in Yorkshire. I was surprised to find that Far Marathon had remained unexplored in the intervening three years. My interest grew and after the 1963 Gouffre Berger trip, I arranged with Bobby Toogood to go down on the first fine weekend. Others were interested in pushing Far Marathon too, notably Dave Judson, the Leeds University lads and Ken Pearce. There was a hint of competition in the air, which added to the excitement.

That year was exceptionally wet even for the Dales and weekend after weekend the streams were in heavy spate until I despaired of ever getting into Mossdale. I was living in Clapham at the time and on the Monday the beck was roaring in full flood over the waterfall at the top of the village for the thirtieth time that summer. The next three days were dry and the peaty waters dropped surprisingly. On Thursday, I phoned the Manchester Weather Centre which forecast a dry weekend. Immediately I got in touch with Bobby, only to hear that he was not well and didn't feel up to Mossdale. To have the right weather and yet not to be able to tackle the cave was infuriating. On the Friday I got through to Pete Livesey and the trip was on.

I met Pete at Skipton bus station next day and we caught the bus out to Grassington. We took the road up to Yarnbury, where the rolling moorland was disfigured by long abandoned spoil heaps.

Two and a half miles out of the village the road dipped down into a broad shallow valley and we took a green track along one side through magnificent purple heather. In the valley bottom were the remains of old dams for washing the ore, mixed up with depressions where the ground had slumped into some underground cavity. We reached the remote farmstead of Gill House and three farm dogs hurled themselves at the end of their chains in fury. Up the valley the Yoredale limestone outcropped as lines of grinning teeth curving round the hillside. The valley was totally deserted, hemmed in by black moors and heavy, slowly moving cloud. Would it rain? We didn't know, but we decided to take our chance.

We changed and paddled over the shrunken beck to the entrance, each with a heavy bag of carbide, food and spare electric lights. In view of all the tales we were ready for twenty four hours down the cave, longer if it flooded. Pete led the way through the boulders and down the streamway. We travelled slowly, careful not to use any more energy than was necessary. The first Drown or Glory was like a great washing tub with thick yellow foam coating the roof for fifty feet before it. This was evidently a relic of the heavy flooding five days before. The second Drown or Glory was coated in the same way, the light reflecting foam contrasting oddly with the jet black rock of walls and roof.

An hour from the entrance we reached Rough Chamber and put on kneepads for the crawls ahead. Rough Passage went easily enough, a long slithering crawl over the polished grit. We tied our bags to our feet and they slid along after us with no trouble. More alarming were the signs of the recent flood; every nook and cranny in the roof was filled with slowly disintegrating froth mixed up with blades of grass and bits of heather. All the low crawls beyond Rough Chamber, 4,000 foot of passage, must have been totally filled up only five days before. Anyone in them at that time would have stood no chance.

Near Marathon struck off the main passage as a rift just high enough to lurch along upright. The rock was full of sharp fossils but the going for 200 foot was surprisingly easy. After this, the cave shrank to a tunnel eighteen inches high, twelve wide. We wriggled in sideways, toecaps scraping the walls, packs dragging over the gritstone pebbles. This was more like it. But before long the passage enlarged to a square tunnel just the right size for hands and knees crawling. The going continued varied, some crab-walking, some crawling, some flat-out work, pleasantly sporting rather than desperately arduous. Then we had a rude shock. I was ahead at the time when the passage grew tighter and tighter over a distance of twenty feet or so. Pushing hard on one side I was suddenly aware of a pool of water ahead and moving my neck round saw a black pool filling the narrow cleft to within three inches of the roof. Ahead there seemed to be a right angle bend mostly full of water. I squeezed in and immediately stuck, the way on to the right being choked with stones underwater. Water flooded into the suit as I tried to clear the stones with one hand while keeping my nose above water. This ghastly going continued for thirty or forty feet to an easy crawl and in a few seconds we had reached what we judged to be Far Marathon Chamber, roughly 900 foot from Kneewrecker Junction.

This point had been reached by a Leeds party on the same date as my first trip into Mossdale. Beyond, the cave had remained unvisited for twenty-two years. A flat-out crawl led from the far side of the chamber. I wriggled in and in a few foot was stopped by a coffin-shaped block that had settled

out of the roof. We had been warned about a boulder blocking the entrance to Far Marathon by Bob Leakey; presumably this was it. I strained to shift the boulder with no success but at length I managed to squeeze over it. Once on the far side I had more room to work and moved it a couple of inches to let Pete through. After a struggle, he pulled it well out of the way.

Beyond, the stream ran through low elliptical passages of resonant rock. The familiar floor of sandstone, with its groove for the water, rose gently to meet the roof on either side of the six foot wide passage. Pushing one arm ahead with our bodies in the centre we made good progress round bend after bend, with the cave dropping steadily all the while. Some hundreds of feet on our stomachs brought us to a barrier of black stones cemented together. Presumably it had built up since Leakey's exploration. We broke it down bit by bit until we could squeeze over it. At the same time, I felt this succession of obstacles was sapping both our physical strength and our will to push the passage to the limit.

Further hundreds of feet of low cave followed. Although we could never rise from our knees, kneepads and gloves made progress quite painless. The roof lowered once more until we were once again slithering along like serpents but by now we were used to it and kept up a good pace. About four hours from the entrance the roof gradually gained in height over a shallow canal. No doubt about it - we had cracked it. And yet, even though we seemed to have been crawling forever, the Marathons had not been nearly as bad as we had expected. Bent double, but at least on our feet, we followed the canal downstream. After some distance, the roof lowered close to the water surface, beyond we climbed onto a pile of boulders. Overhead a black gash cut across our passage at right angles. Up there were the High Level Mud Caverns. Downstream were Stream End Caverns.

We ate cheese, dried fruit and chocolate, feeling completely cut off by the mile or so of black constricted passages between us and the surface. Our meal finished we squeezed into a low opening at the foot of the far wall. A great flat slab took us to a boulder slope down to the stream. The stream passage curved onward, roof rising, dull black walls widening. With the stream flowing quietly over coarse sand the passage could justifiably be called a Main Drain, and yet there was a certain angularity and wildness about it that never allowed us to forget we were in Mossdale. Three hundred feet from the High Level Mud Caverns a large stream entered from an opening on the left, no doubt Leakey's "passage big enough to drive a cow along".

Downstream the cave grew even loftier and more impressive. There were two bends where the cave swung savagely to the left before straightening out again. On the second bend was a monumental boulder almost blocking the twenty foot wide passage. We scrambled up its eight or nine foot shoulders and on the other side cut through a triangular passage half-full of clear water to reach the main stream, which had followed a zig-zag route. A twenty foot high passage with dark greasy walls reaching up to dimly seen recesses followed. We saw no sign of the passage shown leading off to the right on Bob Leakey's survey. Perhaps he mistook one of the recesses for the start of a passage.

The last section of the cave was a rounded tunnel thirty foot high and ten foot wide where the stream flowed under tightly packed boulders. Balancing our way forward we came to a wall of massive boulders across the passage - The Final Choke. We managed to squeeze down into the stream but it was soon lost into the rocks. Through gaps in the choke we could see ten or fifteen foot ahead in places but to have cleared a way through such a precarious mass would have been madness. In any case, the chances of passing the choke were extremely slight whatever risks were taken. Pete climbed a slope to the right which led quite a height above the stream, but even here, there were loose piles of boulders and feeling that nothing short of a full-scale mining operation would get us anywhere we left it as a bad job.

Next on the list of possibilities was the tributary passage we had already noticed referred to by Leakey as "big enough to drive a cow along." After four foot any such attempt would have been doomed to failure, as the passage continued as a flat out crawl in the stream. Once through this, we walked up a comfortable rift for thirty feet to a further lowering of the roof over the stream. The water was dammed up by the pebbles and soon we were crawling shoulder-deep. Pete had a better suit and went ahead. After a minute I heard his shout and wallowed reluctantly after him. My goon suit was giving up the ghost with water pouring in from half a dozen tears. A scramble along a "v"-section rift the other side took us into a chamber strewn with angular boulders. We clambered over them to where the stream flowed from a handsome passage eight or ten foot wide which we followed for about 200 feet.

A wedge of boulders and mud about fifteen foot high stopped us. The stream found a way through at floor level but there was no hope here. I used Pete's shoulder as a foothold to claw a way to the top of the blockage and slid down the other side on a doubled nylon line. Here the stream flowed from a much narrower passage. In a few yards, it turned abruptly to the right and choked. The choke looked fairly easy to dismantle but I left it to rejoin Pete. On the way back we estimated the length of Minicow Passage as about 400 foot, probably heading north or north-east. Quite possibly the Minicow stream is the same one that Bob Leakey had seen below the floor of Tunnel Caves in Kneewrecker Series.

At the rift leading up to the High Level Mud Caverns Pete sorted out the food while I climbed up the slippery fifteen foot or so into the Caverns. They were immense, with expanses of unbroken rock for roofs and huge peat mud deposits sloping down from the walls. A funnel of mud slopes led down to the entry rift. Bob Leakey had not explored the north-trending branch of the Caverns and I pushed on in this direction first. For several hundred feet, I walked along the silent, moist tunnels, rarely seeing bare rock above the mud. Then the going became more intricate, with a slide down a rock face, several crawls under rock curtains and switchback mud slopes. Perhaps six hundred foot from the start the hill of peat mud became much heavier and rose to the roof to block the way completely. There was no way on without digging so I turned back.

At the entry rift once more we chewed some chocolate and climbed back into the Caverns. This time, we were exploring the tunnel leading south which Leakey had never pushed to the limit. It was a very hopeful passage, with luck it would take us back to the main stream beyond the impasse of the Final Boulder Choke. We edged round the side of the mud funnel above the rift, kicking footholds

in the clammy, granular mud. On the far side a typical flat-roofed cave ten foot or more high led off, curving gently now and then but leading steadily south. We walked in a rounded trench with banks of black peat mud reaching up to the roof on either hand. It was quite evident that in times of exceptional flood the Caverns fill to the roof. Probably the trenches are cut by water returning down the entry rift as the floods subside. After a short while, the mud floor fell away on the left hand side until we had some difficulty in staying on our feet. At one point a large block was jammed between the inclined floor and the lowering roof. We wriggled beneath, taking care not to slide down the mud slope below. The cave became more varied beyond, with steep up and down mud banks. We entered an intricate series of wide, low tunnels over the rise and fall of the slopes; sometimes we were momentarily doubtful about the way on. It was here we noticed a cool fresh draught blowing in our faces, marking the route through the narrower parts.

After walking and crawling for about 1000 feet we entered a rising chamber floored with mud-coated boulders. Towards the far end walls and roof closed to a narrow gap almost filled by a boulder. By this time, the clammy greyness of the place had destroyed what was left of our enthusiasm but from a sense of duty we cleared some mud out of the floor. It was no good; without a digging implement, the job would have taken hours. We lay sprawled apathetically on the mud for some time before we could bring ourselves to start out. One strange thing we noticed was that the draught had reversed its direction and was now blowing towards the end choke. Once down from the Caverns we picked up surprisingly well. The stomach crawls of Far Marathon went quite painlessly and we entered Near Marathon much more quickly than we expected. The duck was a grim experience; in the dark I overshot the entry squeeze and a dollop of water put my light out. By the time we had fought our way through we were both soaked to the skin. The worst was over now, though, and we moved slowly and steadily through the rest of Near Marathon and Rough Passage to meet the main stream once more. From here Pete's route-finding took us out with a minimum of effort and an hour or so later we emerged from the entrance crack into a clear, cold night. We had been underground for fifteen hours. It now only remained to walk back to Grassington. We went across the valley, then down to Conistone, falling asleep for half an hour when we hit the Grassington Road.

After the trip I had my customary reaction - a strong desire never to go near the place again. In any case, we had explored all the obvious open passages in Stream End Caverns to obstacles of one sort or another. Honour was satisfied. But when we came to write up the trip a disturbing fact came to light. Pete confessed that at the southern end of the High Level Mud Caverns he had found a rift in the floor which looked as if it would bypass the choke and anxious to get out of the cave had lain across it to conceal its presence. In the weeks following the conclusion became painfully clear. We had to go down again.

October and November 1963 were incredibly wet months in the Dales. For weeks at a stretch, the Ribble would roar under the bridge just down the hill from where I lived. Mossdale was quite out of the question but we did learn of a trip Dave Judson had made into Stream End. The weekend following our visit, he had pushed on to the end with three or four others. They spent three hours in the end choke of the stream passage without success and more in anger than in hope, had let off a charge of explosives. It had no effect and they rated the main stream choke as hopeless. The Sunday

before Christmas the weather was fine and we walked up to the Scar. Flood debris was everywhere, even many feet up the cliff face and the entrance was wedged solid with boulders but we knew it would only take a few hours to clear, so on a brilliant Christmas Day we returned. Christmas dinner was chicken and an orange eaten while Pete shifted boulders from the hole. In an hour he had cleared the hole and returned to what was left of the chicken. Meanwhile, the hot sun had melted a thin covering of snow on the moors, and the beck was rising visibly, a clear purposeful current full of miniature ice floes. Once again there was too much water for us.

After more false starts we found ourselves at the Scar on Saturday, February 7th. This time, there were no fears of the unknown and we changed in quite warm sunshine feeling very cheerful. Then into the dripping blackness of the cave, the streamway to Rough Chamber, Rough Passage and Near Marathon. Pete had made a pinch-bar of steel tube and brass for the end choke which clattered merrily in the crawls as we threw it ahead. He climbed into a tube a few feet before we came to the awful duck and with relief we found that it joined the main passage again beyond it. The remainder of Near Marathon and Far Marathon went without any trouble. We arrived at the rift into the High Level Mud Caverns after about two and a half hours going, feeling fresh.

Half an hour later I was gouging out lumps of mud from beside the boulder at the end of the Caverns. The mysterious hole in the floor had just as mysteriously disappeared and I realised to my cost it had been invented to lure me into Mossdale once more. Then Pete said he could see a hole in the roof and climbed into it. "It goes, come on!" I left the dig and scrambled up a vertical fissure after him. Near the top were jagged flakes held to the sides by a thin cement of mud, then a hole appeared leading straight down. I landed on a mud floor in the passage beyond the boulder. Pete was already flat out in boulders a few yards ahead. He grumbled; "No good, no way through."

A strange jagged arch about two foot high in the left wall took me to a tight chimney eight or nine foot in height. There was an opening at the top and by prising rocks out of the clay I enlarged it enough to get through. I stuck my head through to peer at some vicious rock splinters adhering to the roof. Hoping the guillotine would not descend I forced my way through. Pete followed and we crawled through a rent in the giant boulder block. Bedrock could be seen here and there in the roof, but everything else was boulders, huge black things with wet, gritty surfaces. We moved cautiously through this massive disintegration until in a few feet the floor dropped to a lower level. Clambering over the boulders led to a wall of relatively solid rock with the draught coming from a narrow fissure in the left hand corner. We pulled out the rocks overlying it, only to find it was quite impassable. Nor were our attempts to find a way through from the lower levels of the choke any more successful. Altogether we spent some three hours grovelling about in this three-dimensional maze but all the ways we found led back towards the main passage, not into the unknown. At length, we decided we had had enough and made our way back into the Caverns. With failing lights some small luminous patches on the mud became apparent, presumably some form of fungoid life. Once back in the crawls we made quick progress and reached the entrance after nine hours below.

This trip crippled the reputation of Far Marathon once and for all. After the first trip, we had been impressed by the length and difficulty of the series and had said so. Now, with less gear, better route-finding and more confidence we found the trip reasonably easy and we knew that Far

Marathon, far from being the utmost in physical endurance, was well within the reach of any reasonably fit caver. In a way, it was rather sad to see the legend dissolve, although the length, blackness and chance of flooding still make the trip worthy of respect. With the final boulder choke on both the main streamway and the south branch of the Mud Caverns probed we also felt it was time to let someone else have a go at the place. To pass either of these big obstacles would probably require luck, explosives, or monumental labour, we thought.

About a year later someone else did have a go. In March 1965, Pete had a letter from Tony Waltham of Imperial College London saying that some of his lads had found an extensive dry passage leading south from Kneewrecker Series. It connected with an active stream passage which ended in a loose but definitely possible boulder choke. Tony had another item of news -there were two routes through Far Marathon. On a visit with Mike Wooding of Bristol University, he had entered an exceptionally arduous route and had come back on a much easier route, though with two definite constrictions. He was coming back to push the College discovery after Easter, did Pete want to join him?

At Easter, we met Tony on Mendip. By chance a number of the Leeds University lads were also down and we were able to sort out what had happened. The University College party had in fact pushed a previously unmade connection between the big dry passage leading from Four Ways, and a similar passage entering Tunnel Caves. This was a grave disappointment to them but nevertheless it was a very useful closure. The Leeds lads confirmed that there were two routes through Marathon. Leakey's original route led out of the right hand wall of Near Marathon Chamber; by going straight on past the boulder we had discovered about a thousand feet of passage. This explained a lot, notably the differences of opinion between us and everyone else who had been through! The new route was nowhere near as difficult as the old.

Spring saw several of us back at the Scar. Originally the idea had been to have one party push the southern end of Tunnel Caves in the hope of making the connection with Minicow Passage while another tried the Mud Caverns choke. As we plodded steadily through the stream two lights flashed by, Dave Adamson and Alan Brook of Leeds University, on their way to look at Minicow passage. The rest of the route went quite easily for us as far as the rift up into the Caverns where Dave Judson lost his pinch-bar in the boulders. Having failed to dismantle the boulder choke by brute force, he proceeded to examine systematically every crevice in the boulders. After a good half an hour he found it and we climbed up into the Caverns.

The first place we looked at in the choke was the rift with the draught in the far corner. It seemed to have shrunk tenfold, an insignificant crack with perhaps some widening below. Passages often swell enormously in the imagination and when re-encountered are "not quite as remembered". We had intended widening it with explosives but now it seemed a waste of time and probably dangerous at that. Dave pulled out a boulder from the roof and climbed into an interesting find, another chamber superimposed on the first. I followed him and could hear him already some distance up an ascending crawl heading in the right direction. After a great deal of dubious murmuring punctuated by the grating of rock against rock, Dave came back. It went, he said, but there was every

chance of getting squashed by a boulder. We looked at one or two recesses in the new chamber and then climbed down. I dabbled for a while with another suicide project, digging away the clay holding up a 200 pound boulder, holding up one of a tonne holding up the roof. The idea was to get a view of the hole beneath the draughting rift. In the end I gave up and we set off for the entrance having spent three hours in the choke.

To date we have not been back. The Leeds lads however, took up the cudgels in Minicow. Beyond the greasy climb near the old end they found a mud slope which took them thirty foot or so above the stream. Here easy walking in a high winding rift took them for 400 feet to a boulder choke. In June 1965, Dave Adamson and others visited the choke again. Dave opened up a small hole and soon the party were able to drop down into the stream. Some confused going in boulders led to a shallow sump but by digging away the gravel bank they were able to lower the water enough to get through. Another choke beyond was passed by a tricky climb. A big passage with holes in the floor leading to a stream followed to yet another choke. They dropped down to stream level only to be stopped by another syphon but not discouraged forced a fifteen foot climb back into the high level passage and the inevitable choke.

The sequel was another trip a few weeks later when one party went to Minicow and another to Tunnel Caves. After much shouting and scrambling round in their respective boulder chokes Dave Adamson found himself directly above the Tunnel Caves party. They could speak to one another through a cleft three inches wide in the floor, but try as they might no way through could they find. The connection was a most interesting discovery and tied up one more loose end in the system. The Leeds lads assumed the stream in Minicow came from Far Syphon Passage, only about 200 foot away in a straight line, but fluorescein put in the stream did not reappear, presumably because of slow water movement through the syphons.

The link between Minicow and Tunnel Caves marked another step forward in the exploration of Mossdale. Yet the cave retains its major secret, its course beyond the Stream End Caverns in the four miles of limestone to the resurgence, 400 to 500 foot below. No cave system in this country has anything like this potential for exploration: probably there are miles of galleries beyond. Whether or not they will be entered is another matter. Certainly the two chokes in Stream End Caverns will be hard to break, even in this day of intensive exploration.

Reproduced from "Down to a Sunless Sea" Mike Boon: with permission from John and Daryl Donovan

Alan Fincham's Biography how he got involved with surveying Mossdale Caverns

I came to Leeds University in 1956. I was already quite an experienced caver, previously with the Wessex and Bradford PC. I naturally assumed that Leeds would have a caving club, but no! A group of us applied to the Students Union for some funding to set up a club, but we were told that caving was really just like climbing and there was already a Climbing Club. After some while we eventually won and the Leeds University Speos were established. I can well remember on our first enrolment day a pair of fresh-faced young guys came to the table expressing some interest. "Have you ever done any potholing?" we asked. "No, but it sounds interesting". "What's your name?" "Brook, Dave and Alan"!

I was already a friend of Jack Myers and he suggested that I should also join the NPC, which I did. We had a lot of fun with places like Hammer and Magnetometer. However, I felt that it would be a good thing for the University club to have a project. I had met and talked to Bob Leahey about Mossdale and it occurred to me that being reasonably close to Leeds and with only Bob's sketchy BSA survey being in existence, then here was a project. I put this idea to the Leeds club and it was accepted. In a long series of trips we eventually mapped most of the cave as far as Kneewrecker Junction. Latterly in all of this it was Dave Adamson who enthusiastically took over organising much of the later work. So that is essentially how LUSS (later to become ULSA) got involved in Mossdale.

Earlier Incidents at Mossdale Caverns and UWFRA by Mick Melvin

The Upper Wharfedale Fell Rescue Association (UWFRA) was formed in 1948 by a handful of local men from Grassington and nearby villages, with the aims “To bring relief from suffering to those in need on, or under, the fells of the Upper Wharfedale Region.”

During the first few years of the association, as well as cave rescues, the team rescued sheep and other stock from mineshafts. Members carried out long and difficult searches for people missing on the fells above Wharfedale. They were involved in a number of rescues in Dow Cave-Providence pot, and recovering a fatality from Hell Hole above Trollers Gill.

The last two years of the 1950s saw a number of demanding cave rescues in the Yorkshire Dales, particularly in the Dow Cave Providence Pot system. These rescues required large reserves of manpower, pushing the CRO and UWFRA close to their limits. As a result, the CRO decided to establish local cave rescue teams sourced from the areas where the major caving clubs were based i.e. Leeds and Bradford and some of the small towns in Lancashire.

In 1962 the Bradford CRO team which was affiliated to the Cave Rescue Organisation based in Settle was formed, and UWFRA was not slow in offering their advice and expertise when it was needed. Members of UWFRA provided training to the newly formed Bradford CRO team during the early part of 1962. The Bradford team was invited to accompany teams from UWFRA on practice rescues at New Goyden Pot and fell searches on Buckden Pike. This enabled members of the Bradford team, experienced cavers in their own right, to learn how to organise a rescue attempt and to handle equipment like Neil Robertson stretchers.

This experience freely given, proved invaluable when the Leeds and Bradford CRO teams were called to assist at Mossdale in June 1967. The appalling tragedy at Mossdale Caverns in June that year was not the first time that the Upper Wharfedale Fell Rescue Association team had been called to an incident at the cave.

Other incidents in Mossdale Caverns

On July 25th, 1953 two members of the newly formed Ilkley Pothole Club, Ted Ackroyd and Eric Woodrup entered Mossdale Caverns, the time was 10.00am. When they hadn't returned to the surface by 22.00pm that evening their companion, who had remained on the surface raised the alarm and the Upper Wharfedale Fell Rescue team were alerted and set out for the cave.

The two men spent most of their time underground that day exploring the Far Western Passages of the system; on their return to the entrance, upon reaching the main stream passage, they noticed that the water level has risen considerably. With great difficulty, they managed to make their way to Assembly Hall, a large flat-roofed chamber quite near to the entrance. Once there, due to the volume and force of the water they made a decision to remain in Assembly Hall until the water level had dropped sufficiently to allow a safe exit.

The two men had come well prepared and upon checking their resources found that between them they had: Two headlamps and batteries, one hand torch, seven-part candles, one waterproof tube of matches, six spare bulbs, one petrol lighter, four wet cigarettes and a piece of chalk.

They decided to move as high in the chamber as possible to keep clear of the rising water. From this position they lit a candle and with this, they dried out the wicks of the remaining candles. After establishing what they thought was a more comfortable place to wait, the pair discussed the options available to them. They devised a plan to keep warm by frequent exercise and to explore that part of Assembly Hall above the main stream.

After a time the water level in the stream appeared to drop and they briefly discussed the possibility of trying to reach the entrance. Once more shortly after this, the water rose again and on this occasion came a foot higher than it had previously. During the night, the level of the stream dropped slowly, until finally, in the early hours of the morning, they heard the shouts of the rescue team. Through their shouts and flashing lights they guided the team to where they were at the top end of Assembly Hall. The team provided them with dry clothes; they were given a pot of tea and a bar of chocolate as sustenance. The two cavers left the cave at 0315 hours on the Sunday morning, seventeen and a half hours after entering it.

Despite the successful outcome of this rescue, the team realised that if the rainy weather at the time of this incident had not improved, the outcome could have been very different. In the team's effort to find a solution to the flood risk present at Mossdale Caverns, it was decided to approach the landowner to request permission to create a flood channel on the surface to divert water away from the entrance. This request was unfortunately refused by the landowner.

It was seven years later when UWFRA were once again called out to Mossdale Caverns. On the 20th June 1960 a party from ULSA (University of Leeds Speleological Association) entered Mossdale Caverns, with the intention of completing a survey. Two of the party got separated and went missing; they were June Willbank and John Stevens. Their companions attempted to locate them but to no avail. The main party was already very weary after completing a hard day's surveying and made a decision to send someone out of the cave to raise the alarm.

The call was received by UWFRA at 0215hrs and by 0430hrs a large team was assembled at the cave entrance. Parties under the leadership of Don Robinson and Paul Reinsch began the underground search, with a telephone link being established through to Assembly Hall a twenty minute journey from the cave entrance.

Early the following morning an additional party, including RAF personnel entered the cave to extend the search. An hour later, both the missing cavers were found safe and well in the

Far Western Passages and by 0910hrs were back on the surface. The remainder of the UWFRA members had all left the cave by 1030hrs and returned to Grassington by midday.

Having completed two successful rescues from Mossdale Caverns, the team must have felt confident in tackling any future incidents occurring in the cave. However seven years were to pass before the team were to face their greatest challenge in Mossdale Caverns.

More information (Anytime...Anywhere, UWFRA, Dalesman: 1998. p.47-50)



By permission of Red Rose Cave and Pothole Club: Ron Bliss Mossdale 1967

Tony Waltham's account: Sunday 25th June 1967

The single word "Mosssdale" means so much in different contexts. Followed by "Caverns" it becomes one of the most remarkable caves in the Dales, with the long crawlways explored by the indomitable Bob Leakey, largely on his own, in the summer of 1941. Followed by "Tragedy" it becomes that weekend in 1967 when six Dales cavers died in a massive flood. The six were members and friends of the Happy Wanderers, and none of us will ever forget them; nor can we forget that awful weekend.

I made just three visits to Mosssdale Caverns. The first was in the winter of 1963, with Pete Gregory. He was on my course at London's Imperial College and had previously lived at Yarnbury, when his mining engineer father was working the old mine tips of Grassington Moor. And Pete had then been into Mosssdale, I believe with Bob Leakey, but only into the river passages that formed the initial part of the cave as far as Rough Chamber. He took me into just those same passages, and I was seriously impressed by this amazing cave with its very cold water and the big questions about its far reaches.

My second visit was at Easter 1964 in a group of Imperial College cavers. Two teams went into Mosssdale. One went down Kneewrecker and dug through at the end of Fourways South, only to find themselves in 64 Cavern with a new way into Tunnel Caves. I went down the Marathons with Julian Hardenberg and Mike Wooding (who was by then a regular friend of the Imperial cavers). From the small chamber at the end of Near Marathon we dutifully turned right into Leakey's Marathon, as I had spoken to Bob Leakey about the route and this was the passage that he had followed. It was nearly all wretched crawling on one elbow along narrow rifts, but we eventually climbed up into the High Level Mud Caverns for a look around. On the return journey, we missed the turning into Leakey's Marathon and headed up Far Marathon East, eventually squeezing under a fallen block to emerge in the little chamber at the end of Near Marathon. It was only then that we realised that there were two Far Marathons. The fallen block had diverted Bob Leakey into the West passage in 1941. Only in 1963 had Mike Boon and Pete Livesey shifted the block enough to enter the small and wet passage beyond, thinking that they were following Leakey's route and after dismissing the narrow entrance to the original Far Marathon. They therefore explored Far Marathon East, which proved to be a lot easier than Leakey's alternative.

My third visit was in 1967. On the evening of Friday June 23rd, a group of us drove north from London. We passed through some really heavy rainstorms, but without realising their portent. The morning of Saturday the 24th brought a lovely summer's day. We enjoyed the dry conditions with a jaunt down Meregill Hole. Just along the fell, the Brook Brothers and a Leeds team returned to their new discovery at Black Shiver Pot. And across in Wharfedale, Dave Adamson led a strong team down Mosssdale; he was joined by John Ogden, Bill Frakes, Colin Vickers, Mike Ryan, Geoff Boireau, John Shepherd, Jim Cunningham, Morag Forbes

and Colette Lord. Their aim was some blasting and excavation at the southern end of the High Level Mud Caverns.

We emerged from Meregill in the early afternoon. At about the same time, John Shep, Jim, Morag and Colette turned round on their short trip into the Mossdale river passages, leaving the other six to continue into the far crawls. With much of the day still in hand, we headed for a quick trip down Washfold Pot, but were forestalled by a heavy rainstorm. We waited it out on the Ribblesdale road, but then abandoned Washfold and merely laid plans for the Sunday. The same rainstorm trapped the Leeds team in Black Shiver Pot, where they endured long, enforced waits in various semi-dry chambers. And the same storm turned Mossdale Beck into a raging torrent.

While her three friends had returned to Braida Garth in the afternoon, Morag Forbes had waited at the How Gill hut for her fiancé, Dave Adamson. With the heavy rain continuing, Morag walked back to Mossdale for a second time and was horrified to find a great lake across and over the entrance. She ran across the fell to Yarnbury, where she could make the phone call to set the rescue effort in motion soon after 11pm.

The call-out was massive, and throughout the rest of the night Mossdale was the scene of frenzied activity, with huge numbers of cavers along with fire engines, pumps, JCBs and tractors all working to stem the flow of water into the cave. By dawn there was a major new diversion ditch, six feet wide and deep for more than a hundred yards to carry the beck's still powerful flow beyond Mossdale Scar and away to the Bycliffe Sink in the valley towards Gill House. The ditch's left wall was essentially a dam overlooking the Mossdale entrance, and it was a fragile structure that required constant repairs and improvements to keep the water away from the cave. But it worked, and by mid-morning cavers could get back into the cave. Among the first were some of the Wanderers, including Frank Barnes and John Rushton (some memories have faded in the nearly fifty years to when this was written, and there are other names that should be added here if anyone lets us know). A phone cable was laid through to Rough Chamber. But no-one had been further into the cave before and the far crawls had a reputation of complicated route-finding in a maze of small rifts. So, while the stream flow continued to ameliorate, there was a bit of a hiatus in progress.

Because my university friends and I were based in London, we were on no call-out lists, and we slept through the night in blissful ignorance in the Clapham barn that was our usual weekend abode. We emerged in the morning to find the notice on the door of the CRO depot announcing a call-out at Mossdale. It was Jon Hallam who recognised that this could be big and still on-going, and persuaded the rest of us that we should head for Mossdale even at this late hour. Only on arriving at Conistone did we realise the scale of the event. Jon had a Land Rover, so we were quickly dispatched up the track to Mossdale. On arrival at the Scar, fronted by a new sea of mud, cavers, machines and ditches, we reported to the

Surface Controller and I casually mentioned that I knew the way down the Marathons. The instant reaction from Len Huff was that I get changed and head into the cave where a strong team led by Jim Eyre was waiting for a Marathon guide. Dave and Alan Brook were not around, because they were still stuck in a Black Shiver Pot that nobody else knew existed, Pete Livesey was climbing in Norway, Mike Boon was in Canada, and Dave Judson was away in the south.

Early in the afternoon, I headed into the cave, along with Julian Coward. At first it was almost like a reunion weekend as there seemed to be a Wanderer stationed at each junction through the stream ways and lakes of the entrance series. And the atmosphere was not all gloom, because we were hoping, and almost expecting, that the six cavers were waiting it out in the High Level Mud Caverns while they were justifiably wary of climbing back down into the Marathons until they knew there was not another flood on its way. At Rough Chamber, Julian and I met up with the main team who had been waiting for someone who knew the way ahead. A small group led by Frank Rayner had already been down into Rough Crawl, clearing some gravel banks that had been left by the flood, and they then joined the main team to go down the Marathons. So we set off as a team of nine, with me in front, followed by Jim Eyre, Julian Coward, Frank Rayner, Jim Newton, Jim Farnworth, Alistair Milner, Jack Bloor and Richard Dickinson.

Rough Crawl is fairly easy going, and there was almost no water flowing down it. With few junctions to sort out, we were soon at Kneewrecker Junction, where we turned right into Near Marathon. With further rapid progress we arrived at the small chamber at its end and headed under the fallen block into Far Marathon East, reasoning that Dave Adamson's team would never have used the much harder route down Leakey's Marathon and there was no benefit in it for us either. Part way along Far Marathon East, I came across an Oldham accumulator in the passage. It was caught by the headlamp that had snagged around a small projection in the floor, with the cable to the battery case at full stretch downstream. The lamp had not been left there; perhaps it was a spare that had been stashed in a side rift or even back in the chamber at the end of Near Marathon. And it had only been carried to its new position by a powerful torrent. There had long been debate over whether the Marathons flooded by a silent backing-up of water ponded by a downstream choke, or by a wall of overflow water hurtling down the small passages after the capacity of Syphon Passage was exceeded. That lamp suggested that the latter scenario was nearer to reality.

As we continued yet further down Far Marathon, we realised that the chances were increasing of finding our friends waiting at the head of the climb into High Level Mud Caverns, which was now not far in front of us. We even resorted to an occasional shout down the passage. I can remember starting to feel good, even enjoying the interminable crawling, with the prospect of a successful search and reunion. But I was brought up short when I rounded a corner and saw four neoprene-covered legs across the passage in front of

me. "They're here," I called back. "Are they OK?" replied Jim. "No, they're dead," was my sad response.

The first few of us shuffled up together in the confines of the passage. Two bodies were jammed up into a side-rift, wedged in by what had been a desperate search for airspace, leaving their legs trailing back out into the passage. We realised that we were seeing the aftermath of an awful tragedy that had occurred the previous afternoon.

Jim Eyre started making the decisions. A team had to go back out to carry the news. The two bodies had to be identified, and the others had to be found. A few questions and it turned out that only Jim Farnworth knew all the missing cavers, so he was on the identification team. I have to admit that I was not feeling good, and maybe Jim recognised this, so he put me at the head of a team of three to take the news back to the telephone in Rough Chamber. We headed out. Those who stayed behind soon identified the first two bodies as Geoff Boireau and Mike Ryan. They then found Dave Adamson, Bill Frakes and Colin Vickers not much further down the passage. Somehow, confusion took its toll, and among that team down at the sharp end it was thought there were only five missing cavers. So they soon headed out as well.

My mind must have been addled, because on the way up Rough Crawl I took a wrong turn and grovelled along Oomagoolie Passage as far as the distinctive, eponymous mid-passage rock. By the time we turned back, Jim's group had gone past, so it was they who took the bad news to the telephone in Rough Chamber.

Out into daylight I was just one within a group huddled around the Upper Wharfedale Controllers. There were some folks already planning the teams and logistics to bring the bodies out, but I was among those who suggested this was just not realistic, and that the cave should become their grave. The sheer effort would have been Herculean, but the overriding factor was the weather. With further heavy rain imminent, there was just too much risk of the cave re-flooding. The dams had breached already, while the search team was underground, and a new invasion of floodwater had only been prevented by instant repairs with cavers almost literally throwing themselves into the breach. There was also some concern about where the beck water was going to from its new sink down the valley, and whether it could find its way back into the cave; this was unlikely, but not impossible as there were too many unknowns. The prospect of a new flood hitting teams of stretcher-haulers in the Marathon crawls was too awful to contemplate. Everyone came out from underground.

It was by then Sunday evening, and I had to return to London, thereby missing the next phase when it was realised that there was a sixth caver unaccounted for. John Ogden had not been found, and there was a faint hope that he could have reached safety in the high-

level chambers. Only late on the Monday afternoon did water conditions let anyone back into the cave; two teams reached as far as Rough Chamber, but were then called back out when the beck rose again and threatened to overtop its dam. The weather improved on Tuesday, and a team consisting of Dave Brook, Alan Brook, Dave Cobley, John Rushton, John Sinclair and John Trott searched all the Marathon passages, including the High Level Mud Caverns where John could possibly have reached a safe refuge; but to no avail. Then, in the early hours of Wednesday morning, a team lead by Brian Boardman found John's body. He too was jammed into a cross-rift, and almost out of sight, but very close to the other three, where they had all been washed down to the debris cone beneath the High Levels. The earlier teams had not spotted the soles of John's boots where the rest of him was hidden by cobbles washed in by the flood. Later the same day, the coroner met with the police and rescue leaders, and confirmed the earlier decision that the bodies could not sensibly be brought out and the cave should be closed.

Three years later, a small team of Leeds cavers returned to Far Marathon and buried the remains of their friends in The Sanctuary, a blind side passage off the northern arm of the High Level Mud Caverns. For many years after that, Mossdale Caverns was left untouched. But since then a new generation of cavers has returned, though without yet finding the onward galleries that the 1967 team was hoping to explore. And high above the stream way, the remote side passage of The Sanctuary still holds our friends in perpetual silence.

Frank Rayner's account: Sunday 25th June 1967

Anyone who was involved with the Mossdale Caverns rescue attempts on 24th to 28th June 1967 will know that weekend marked the end of a prolonged dry spell in the dales. It had been good weather all over the country, In fact, a dry June. The breakdown in the weather came late Saturday evening, 24th June, with thunderstorms and torrential rain over the dales, including the Mossdale catchment area, which is huge.

The WRPC had booked a club meet to do a Simpson's – Swinsto exchange in Kingsdale but the weather conditions didn't look good for that, on Sunday morning 25th June.

I didn't know anything about the Mossdale incident until about 0840hrs, when a police car came up our street in Bramley, Leeds, as we were loading the tackle onto the bus. (I was the tackle manager then – so the bus called at my abode for all club meets.) The police officer told us about the Mossdale call – out and as members of the Leeds area CRO team, we responded immediately.

We left Leeds at about 0900hrs. I went by private transport to Yarnbury, Grassington, where a few people commenced the walk to Mossdale Scar. We didn't go via the How Gill Nick route, but used the public footpaths, just to the west of Gill House, which joins up with the Bycliffe track from Conistone. Rescue vehicles, Landrovers, tractors etc. were driving up from Conistone and the track was rapidly becoming impassable.



A short time later, I arrived at Mossdale Scar. The weather was cloudy with occasional showers. Persistent rain had ceased earlier. Just before the track rounded the last bend, but still not in full view of the scar, the first thing I saw was a huge column of water forming a large arc, which eventually fell back to the ground, some distance away. Further on when the whole scene came into view, I could see the water was coming from large fire-brigade high capacity pumps, run from generators, with cables and large hose pipes laying strewn across the ground. The pumps were extracting large volumes of water from Mossdale beck and putting it into a diversion trench over a hundred yards long, taking the flow safely past the scar and on to Bycliffe sinks.

A dam had been constructed across Mossdale beck, but the water level behind the dam wall was still very high. The trench was being widened and the dam wall built higher, which in turn required extra re-enforcements to be made almost continually.

The initial call-out had come to UWFRA at just after 11pm Saturday evening. 24th June. The response was huge and there was no shortage of manpower at the scene. There were cavers from many different clubs, various rescue teams, police, fire-brigade, medical teams, tractor and digging-machine drivers plus a contingent of general helpers, all in attendance at Mossdale Scar.

Mechanical diggers had been used for the heavy construction works, but the first diversion trench and dam across the beck later proved to be inadequate for the prevailing and developing weather conditions to come. Underground teams had worked all night in the cave but there had been no appreciable fall in water levels until late morning, Sunday 25th June. UWFRA and CRO had combined resources at the scene and the pool of manpower available was still increasing, as time passed. At about 1130 hrs. Sunday, surface rescue controllers addressed a large crowd of cavers and helpers asking for anyone who had previous experience in Mossdale and at that point Richard Dickinson (Jake) WRPC (later HWPC) Leeds area CRO team and I, volunteered to lead the first search team into the Marathon passages. We were to conduct a speedy reconnaissance and search for five missing men. The real experts for Mossdale (ULSA) were, of course, absent and otherwise



'engaged' at their new find at Black Shiver Pot, on Ingleborough.

Telephone contact with Rough Chamber was established just after noon, Sunday 25th June. Our team of initially, six men, prepared to go underground to search beyond Rough Chamber and into the far reaches of the cave. In the Marathon passages and beyond, contact with the surface was not possible, until our return. The first search team led by F. Rayner entered the system in the early afternoon to explore "Far Marathon Passage." This team consisted of Frank Rayner WRPC (later NCC) Leeds area team CRO, Jack Bloor GC

Leeds area team CRO, Richard Dickinson (Jake) WRPC (later HWPC) Leeds area team CRO, and three university members. (Names unknown.) When we arrived at Rough Chamber the all clear was given from the surface, to proceed with the search into Far Marathon. Jim Eyre was already at Rough Chamber when we got there and he remained at the telephone to maintain contact with the surface. I am absolutely certain that he did not come with our six-man team. I saw him there when I left to begin the search and he was still at Rough Chamber when I returned later in the afternoon.

The team moved quickly along Rough Passage and into Near Marathon, but as we got further along the crawls the 'mood' within the group became very subdued and worried. Nobody spoke at all. The passage had obviously been recently flooded to the roof everywhere. Richard Dickinson and I took it in turns to lead the way. Periodically, we had to slow the pace and even stop to move flood froth or foam aside, in order to progress. We all became very concerned about what we might find. Anxiety grew and I tried not to think about where we were, or what could happen to us in flood conditions. The acoustic properties of the passages didn't help either. They produced a cacophony of very eerie 'booming' and 'gurgling' sounds, which echoed around us. It was obvious to everyone it was a very dangerous place to be during inclement weather.

We were in Far Marathon- then suddenly; a miner's electric cap lamp, in the middle of the passage. A short distance further--two bodies. Everyone was devastated. The scene hit us hard. It was our worst nightmare come true. One of the three university members with us immediately left the team to return to Rough Chamber; perhaps he was suffering from the tension of the situation or from claustrophobia. Who knows? At any rate, our team was instantly reduced to five men, to carry on with the search. I noticed my acuity of vision increased greatly and my colour perception was intense. I found out later this could have been due to shock. We moved forward again. There was enough room to pass by the first two of the drowned men, but airspace in that general area during a flood would be non-existent. Some distance further along Far Marathon was three more deceased men. There was no need to go any further, Jack Bloor spoke first and said: "We must identify as many people as possible before we leave." This grim task fell to Jack Bloor and Richard Dickinson. It involved moving the bodies and looking at the albescent faces of the dead. I think it's inappropriate to mention any names here, suffice to say Richard knew three of the group; two others were unknown to us. The remaining two university members with our search team had waited back along the passage.

We had completed the task allocated to us and it was time to leave. We returned to Rough Chamber in the late afternoon Sunday. Jim Eyre picked up the telephone and reported the sad news to those outside the cave. Controllers and other surface personnel had been monitoring the condition of the dam across Mossdale beck and also the deteriorating weather conditions, throughout the afternoon. They were concerned about the safety of the underground teams. The potential for another catastrophe was very real and consequently a few minutes after the bad news had been passed to the surface---all the teams were instructed to leave the equipment and evacuate the cave, as quickly as possible. This was completed by about 6pm Sunday. The weather then obliged with another thunderstorm and torrential rain.

Later, it became known that there were actually six men in the original party. This was confirmed by John Shepherd, who was in the original group. Nothing more could be done about the missing man on Sunday, until at least the weather had settled again. Water was right up to the top of the dam -wall and nearly spilling over when we left.

I have two points to mention here. Firstly, no one had been in the Marathon passages, before our six-man team. I didn't see any other men or search teams going into or coming out of the Marathon passages along the original route, or the Far Marathon (East), during that day. The fact is, there simply wasn't enough time for another team to be looking and searching for the missing men, in that area or beyond. The whole idea behind the small team was for fast progress, in a dangerous area and it was fast, both in and out of the Marathons. We didn't have any route finding delays either. Secondly, there wouldn't have been any point in risking more men than was absolutely necessary for the task, in view of the unstable weather and the condition of the dam across Mossdale beck.

Monday 26th June 1967.

After prolonged overnight rain, it was found that the dam across Mossdale beck had been breached in two places. It was obvious that a great deal of extra work was required to make the dam safe again. Any operations into the far reaches of the cave were suspended until this was achieved. Eventually, the main dam was declared safe again and also a secondary emergency dam constructed. This work took all Monday to complete.

Tuesday 27th June 1967.

Late on Monday and into Tuesday, the Settle-Ingletton team ascended the acclivity behind Mossdale Scar, to assess the possibility of a dig at Black Edge Pot or Black edge shakehole. It was hoped to access the cave via a high aven shown on the survey, near to Rough Chamber. This would have been a truly colossal task. The idea was found to be impractical and later abandoned. At one point a massive drilling machine was offered, capable of sinking a shaft into the cave. The equipment weighed in at over 50 tons. Transporting it across soft moorland ground would have been almost impossible; so this offer was not taken up. (There was also a high hourly charge- rate for the machine.) The modern grouse- shooters' road which goes up in that general direction, behind the scar didn't exist in 1967.

Richard Dickinson and I returned to the scene again on Tuesday morning. This time, we got a lift up from Conistone in a Landrover belonging to one of the digging- machine drivers. We remained there all day. Mid-afternoon Tuesday, D. Brook (ULSA) led a party underground into the Marathon passages and beyond, to make an extensive search of the far reaches of the cave. They did not find the missing man. This team confirmed the names of four of the deceased. The lamp our team had found on Sunday in the middle of the passage, in Far Marathon was found to be about 100ft nearer to the cave entrance, from the first two bodies. On closer examination, it was also found to be stamped with the initials "CRV." During Tuesday Dr Hugh Kidd and Ken Pearce of Derbyshire CRO team entered the system and examined the deceased, confirming the cause of the deaths of the five men was asphyxia, due to drowning.

In view of the fact that there was still one man missing from the original party, it was decided to make one further last search in the cave. Richard and I were asked to lead B. Boardman CRO and his team to the start of the Marathon passages. We entered the cave again late Tuesday evening. Boardman's task was to examine all side passages and two loops in the Marathons. Richard and I were to search the 'Kneewrecker System.' This we did for a considerable distance, but we found nothing. We exited the cave for the last time at approximately 0300hrs Wednesday 28th June. Later, I learned that the Marathon team had finally located the last missing man. From this point, the Mossdale operation was run down and the landscape returned to as it was before.

I can recall the rescue attempts at Mossdale with vivid clarity. I'll never forget it.

I've never really spoken much about the rescue operations, much less written anything about them. The memories of what happened there still upset me. I will not be pressured

into acquiescence, regarding other fictitious or an imagined sequence of the events of that weekend in 1967. I have given an accurate and truthful first-hand, eye-witness account of what actually happened to me personally, whilst at the scene.

Twenty five years after the Mossdale incident (1992). Mick Watson was walking in the area when he noticed that the memorial plaque attached to Mossdale Scar had come loose. It was originally only nailed to wooden chocks, in cracks on the face of the scar. We both decided to make an effort to fix the plaque securely to the rock-face. We drove up to Mossdale Scar from Conistone, with all the necessary equipment in a Landrover, with a section of rigid ladder on the roof. Mick obtained permission for this and the gates were unlocked. We drilled holes in the rock face, by hand, using my bolting- kit. The plaque was re-secured using M8 Allen cap-screws, at about 12ft from ground level. The job was completed in about 2hrs.

Photo by Permission of The Red Rose Cave and Pothole Club



The Mossdale Caverns Disaster by Alan Fincham

The disaster of June 24th at Mossdale Caverns, Conistone Moor, will be remembered as the most tragic accident in the caving history of this country, leading as it did, to the deaths by drowning of a party of six very experienced and well equipped cavers, amongst whom were some with the most intimate knowledge of this arduous and complex cave system. The sense of shock and grief has spread very far and deep amongst both relatives, cavers and friends alike and will be a bitter memory for the rest of our lives.

Inevitably we find ourselves asking; why did this happen? Could it have been prevented? Was enough done in the circumstances? What should we learn from the tragedy and how can we ensure that it will never be repeated? The writer is one of those who, through long experience with Mossdale and friendship with some of those who died, finds himself involved in these considerations and feels that some answers must be given. In what follows a factual account of the circumstances and results of this disaster is given, although there are some matters in which the views expressed are those of the writer and are not necessarily those of the many other persons concerned.

To understand why this party ever entered Mossdale on that fateful Saturday, it is necessary to know something of the history of exploration of the system.

Entry to Mossdale Caverns was first made in 1941 by a party of cavers from the British Speleological Association who penetrated the cave through what has come to be known as the Lavatory Basin (or Old) Entrance. For some years after this exploration was carried on under the leadership of R.D. Leakey and the cave was roughly surveyed to the limits of the Marathon and Kneewrecker branches of the system. In 1947 an account of this work was published in *Cave Science* (Vol. I. p. 7) with a provisional survey plan of the cave.

During this phase, the exploration was impeded by the necessity of obtaining low water conditions in Mossdale Beck which made access through the restricted and wet Lavatory Basin Entrance feasible. At a later date the New Entrance was opened into the cave at the northern end of the Scar, enabling parties to enter and leave the system with greater ease and safety, even in relatively high water conditions.

However, the British Speleological Association parties seemed to lose interest in the system and further exploration and detailed survey appears to have ceased for some ten years, until in 1957 parties from the newly founded Leeds University Speleos began to visit the system with a view to producing a detailed survey of the known passages and eventually, it was hoped, of extensions to the cave. At this time cavers with any significant first hand knowledge of the cave were few, and the Leeds parties found it necessary to 'explore' the cave from the beginning, slowly gaining in knowledge and experience of the intricacies of

the nearer passages and advancing the detailed survey methodically through all of the nearer reaches of the cave, In the course of this work, it became clear how great was the deficiency of recorded information on the system; several passages apparently hitherto unexplored and unsurveyed were found and the real problems in making a full survey of this extensive labyrinth were appreciated.

Not the least among these problems was the existence of a grave flooding risk, which presented an even more serious aspect when we considered the very large number of man hours which would be required to complete a full survey of this complex, and in many parts very restricted, system. We knew by inspection that in severe flood it was likely that nearly all of the passages in the nearer parts of the cave would fill to the roof; possible exceptions to this being in Boulder Hall, some avens in Broadway and the Great Aven (c.80' high) near Rough Chamber. Beyond this latter aven it appeared certain that all of the passages would flood apart, perhaps, from High Level Mud Caverns towards the end of The Far Marathon Series and a few avens in the Kneewrecker branch of the system.

During the earlier phases of the Leeds survey (1957-1960), work was concentrated in the section of the cave up to Rough Chamber and then later (1960-1962) in the complex of small passages between this chamber and the junction of the Kneewrecker and Marathon passages. This section of the cave proved to be intricate and required a great deal of time for survey and exploration. Parties were safeguarded by the installation of a telephone line from the entrance to Rough Chamber, and frequently operations in the cave were carried on from a standing surface camp which enabled constant communication to be maintained and the timing of activities to be selected at leisure. In this way the survey and exploration of all passages up to Kneewrecker Junction was virtually completed by 1962. Then came a lull in activities due perhaps to changes in interests among some of the surveyors and the natural periodic recession which clubs are subject to from time to time.

The completion of the Mossdale Survey became a thorn in the side of the Leeds club and it was two to three years before a new wave of surveyors and explorers, freshly clad in wet suits, took up the task again. The telephone line had long since fallen into disrepair, each violent flood taking its toll despite efforts at repair and replacement. The new team were not greatly interested in the 'nearer' parts of the cave and telephone lines were not then thought feasible beyond Rough Chamber (some 30 minutes from the entrance) where the cable would prove a constant impediment in the smaller passages. However, the cable to Rough Chamber was again replaced and 'contoured' as far as possible to the passage wall. This was the third full telephone cable which had been run into the cave and these operations alone had consumed much valuable time and man-power. No cable was ever installed beyond Rough Chamber, although this was discussed on a number of occasions.

1965 produced a fresh wave of activity, and in a series of lengthy sorties into the extremities of the cave the 'new' men now made rapid progress with the survey which had been started so long ago. The Near and Far Marathon Passages were surveyed and the existence of a loop passage in the Far Marathon (Far Marathon West) was confirmed. Stream End Cavern and the ramifications of the Kneewrecker System were explored and surveyed in detail. An aural connection between the Marathon and Kneewrecker Systems was established via the extension of the Mini-cow Passage from Far End Stream Cavern, and the suspicion that the Far End Stream was not the same as the Main Stream seen at Broadway and Syphon Passage was confirmed. Work was done to try and force ways through the chokes at the extremities of High Level Mud Caverns and at the terminal choke of Stream End Cavern. In 1965 upwards of 8 major survey trips were made into the cave yielding over 7,600 feet of surveyed passage and utilising over 400 man hours of caving time. It must be recorded that Dave Adamson was prominent amongst those who completed this arduous task. The exploration and survey of the readily penetrable passages of Mossdale Caverns was then complete and it had taken many good cavers hundreds of man hours to carry out.

The next phase of the exploration was clear; to attack those few places, of which we now know, where a real extension of the system could be expected. The survey had shown over five and a half miles of passages, enough to place the system in the top ranks of British caves, and yet it was clear that this was but a beginning. Above all what was the course of the main stream beyond the sump in Syphon Passage to the rising at Black Keld? What was the origin of the intense draught felt in Far Western Passages? Of what high level series were The High Level Mud Caverns a fragment? What lay beyond the terminal choke of the Stream End Cavern? It was the promise of these challenging questions which motivated the party of six on June 24th 1967.

A party of ten cavers entered the system at about 1400 hours on Saturday June 24th. No one was left on the surface since telephone communications were not in use and the underground cable to Rough Chamber was known to be broken in several places. There had been some rain over the Grassington area in the previous few days, but the moors appeared dry and the quantity of water entering the cave was well below normal. The weather forecast for the north had been noted as 'bright periods, chance of thundery showers'. After entering the cave the party at once split; six men going on in front with the intention of examining the extremities of the High Level Mud Caverns or probing further for a way through the Stream End Cavern boulder choke. These six men, well equipped and very experienced were; Dave Adamson (U.L.S.A.)*, Geoff Boireau (U.L.S.A.), Bill Frakes (B.P.C.** and N.C.D.G.***), John Ogden (H.W.C.P.C.+ and N.C.D.G.), Michael Ryan (B.P.C.) and Colin Vickers (B.P.C. and N.C.D.G.). The remaining four cavers; James Cunningham, Morag Forbes, Collette Lord and John Shepherd, made a sight-seeing trip as far as Rough Chamber and returned to the surface which they reached at about 17.00 hrs. It was now raining lightly; the sky was overcast, but the conditions did not appear to give any cause for alarm. The four

cavers returned to their base at How Gill Nick shooting hut where they changed and made a meal. Having, at that time, no apparent cause for anxiety, three of the party then left for Ingleton leaving Morag at the hut. The rain continued to fall lightly and at about 19.30 hrs. Morag returned to the Scar and finding little apparent difference in the water conditions, she made her way back to the shooting hut; some

Note * University of Leeds Speleological Association.

** Bradford Pothole Club.

*** Northern Cave Diving Group.

+ Happy Wanderers Cave and Pothole Club.

half hours walk over the moor. Shortly after this the rain began to fall heavily and being now concerned for the safety of the underground party, she again went to the Scar, arriving there at about 21.00 hrs.

Mossdale Beck had now risen to flood proportions, an extensive lake having formed in front of the Scar. The entrance was already under water. Realising the grave situation she ran to Gill House Farm (some three quarters of a mile) for help, but found it deserted, and went on to Yarnbury (a further one and a half miles) where she contacted a Mr. Riley who drove her down to call out the rescue organisations.

The call for assistance reached the Upper Wharfedale Fell Rescue Team at 23.10 hrs. who at once sent a party up to the Scar, alerted the C.R.O. on a 'stand-by' basis and put in a request for Fire Brigade personnel and pumps. The advance party of the Upper Wharfedale team arrived at the Scar at 01.15 hrs. on Sunday June 25th and found conditions very serious with the 'New Entrance' under some 4ft. of water. By about 02.00 hrs. some attempt at stream diversion was under way, the Settle-Ingleton Team of C.R.O. had been called together with as many members of the Leeds University Club as could be found. A small dam constructed around the constricted New Entrance enabled a party of the Wharfedale Team to reach The Assembly Hall (just inside the cave) by 02.25 hrs., but they found the normally limited air space beyond Black Pool Sands, which provided the only way on into the cave completely submerged and impassable; the use of diving equipment at this stage would have been both futile and dangerous and therefore further progress was out of the question until the water level could be sufficiently reduced.

During this time the Fire Brigade had installed a number of portable pumps on the side of the beck, which were sending a stream of water past the Scar and on down to the sinks on Conistone Moor. By 03.30 hrs some 8-12 of these pumps were operating, but it was clear that this effort was having a negligible effect on the water levels despite the rain having stopped shortly after midnight. At about 05.00 hrs it had been decided that the only possible solution was to obtain the use of heavy digging equipment and divert the whole of

Mossdale Beck down past the Scar. To do this required a trench some 130 yards long by 6-8 ft. Deep together with a substantial dam to divert the beck from the sinks at the foot of the Scar.

By about 08.00 hrs on the Sunday the level of the beck appeared to have fallen a little and a telephone connection had been established between the entrance and the Assembly Hall. It was now found that it was possible to pass the previously submerged sections of the cave, (The Drown or Glories and The Swim) and to penetrate as far as Rough Chamber. It was hoped that the missing party might have been trapped in this rather loftier section of the system and have been able to survive the flood in one of the avens or in Boulder Hall itself. However, no sign of the party was found, and at Rough Chamber a strong stream was still flowing onward down, the normally dry, Rough Passage. This situation only occurs when the restricted sump in Syphon Passage is unable to take all the Main Stream flow and the water will then back up and flow via Straightway to Rough Chamber and on through Rough Passage to Kneewrecker Junction where it will divide and flow in part down the Marathon and part into Kneewrecker. It was then felt that it would not be reasonable to proceed further through the restricted passages until the water flow could be reduced and the dam (which was then under construction) was operational. At this time it became clear to those of us who knew the cave that the chances of survival of the missing men were slim; the signs in the cave were of a very extreme flood, and there were only a very limited number of places beyond Rough Chamber in which a party might be safe, and of these we were uncertain. Certainly an experienced and well equipped party, such as this was, would be perfectly capable of sitting out a flood for 12-24 hours and then of getting out of the cave under their own steam, but although by midday the proportion of the beck entering the cave had been reduced to a trickle there was no sign of the missing men.

At last the water diversion and dam were functional and thought to be sufficient to protect underground parties from further flooding and at 12.40 hrs a party of six were sent in to search the Marathon Passage. This team was supported by a further party of six who entered the cave at 13.25 hrs. The telephone line to Rough Chamber was now functioning rather erratically and more rain was forecast for the area.

At 17.40 hrs on Sunday 25th June it was reported that the first search party had found five bodies in the far part of Far Marathon West Passage a short distance upstream of the junction with the Far Marathon East which carries a small stream.

Until this time all of the official statements had reported that there were five men in the missing party, five names had been given and five bodies had now been found. The shock which had fallen on all of us was now broken by a report that there were in fact six men in the party. Some while was taken to establish this fact with certainty and to determine the names of all six men. By this time (18.00 hrs) the effort which had been expended had

depleted the ranks of the rescue party. It was decided that, in view of the extremely remote chance of the sixth man having survived, further efforts to locate him and to identify the bodies would be postponed until Monday. It began to rain lightly.

Monday proved to be a bad day. Heavy rain overnight had weakened the dam, the weather forecast was bad, and underground telephone communications had broken down. Eventually, when parties did get underground it was found that there was an acute shortage of men who had any real knowledge of the far parts of the cave which resulted in wastage of manpower. Finally, renewed rain caused a dangerous rise in water level behind the dam (the diversion channel presumably being of insufficient depth and width to cope with the increased flow) and all parties were withdrawn from the system by 17.00 hrs.

Tuesday June 27th saw a further effort to strengthen the diversion dam, and the 3 excavators worked at this task throughout the morning producing a structure which was about 6 feet high. More work was carried out on the secondary dams around the entrance enclosure. There was now no thought of the operation being one of rescue, but rather one to determine the fate of the sixth man, to establish the identity of the bodies that had been found, to do what we could to either bring them out, or bury them as well as we could underground within the cavern.

One of the greatest defects in the rescue operation at that time had been the failure to establish reliable communications between the entrance and Rough Chamber and beyond. These communications were the more essential in view of the flood scare which parties had had on the previous day. Therefore, every effort was made to provide the parties working underground with the maximum security which we could achieve. Massive reinforcement of the dam was undertaken, and Harold Lord of the Derbyshire Rescue Organisation provided a very efficient transistorised telephone system which was used to provide a service to Rough Chamber and later as far as Kneewrecker Junction.

Security having been established, parties were then despatched to make a detailed search of the extremities of the Marathon Series in an attempt to locate the body of the sixth man who, it was thought, may have been swept further into the cave by the high pressure waters.

Dave and Alan Brook and Dave Howitt of U.L.S.A. with three others entered the cave about 14.00 hrs. They reached the end of the phone at Kneewrecker Junction in about 50 minutes and some 3-4 hours later they reported back to the effect that no sixth body had been found despite an intensive search of the far parts of the cave. Identification of the five bodies had been made but John Ogden had not been found.

The Brook brothers and Dave Howitt were known to have a most detailed knowledge of the

remote parts of the cave and it did not seem likely that they would have missed anything. Therefore, it had to be concluded that Ogden's body was either in the Marathon Passage or possibly in some nearer part of the system. The latter possibility did not appear very likely but had to be considered and steps were taken to search other parts of the cave with the idea that Ogden might have been on the way out in front of the others when the flood struck. Also, a further party which included Ken Pearce and Dr. Hugh Kidd of Derbyshire Cave Rescue Organisation and Tony Salmon of U.L.S.A., went in to consider the feasibility of bringing the bodies out of the cave and to legally establish the cause of death. The Brooks party arrived at the surface at about 19.30 hrs. bringing with them a number of items for identification amongst which was a piece of wet suiting which did not appear to belong to any of the other bodies and was subsequently identified as having come from Ogden's suit. Dr. Kidd and party surfaced at about 21.00 hrs. and reported that they had failed to find any sign of Ogden and also that they considered the task of retrieving the bodies was unreasonable in view of the labour and risk to personnel it would involve.

A third search party led by Brian Boardman (C.R.O.) entered the cave at 22.00 hrs with instructions to search a number of minor side passages opening off the Near and Far Marathon Passages. At 03.10 hrs. on Wednesday morning Boardman reported that, whilst making an examination of the area in which three of the bodies had been found, he had located what he believed to be the body of John Ogden, jammed vertically in an extremely tight rift only some 15 feet from the other three, but so covered with silt that only the boots, socks, laces and a part of a white helmet were visible. He had been unable to get a closer view, but the details which he was able to give agreed with the clothing Ogden was known to be wearing; thus, in part by a process of elimination John Ogden too was found drowned.

The tragedy was complete, six of our friends, six most experienced cavers, had all died together, suddenly, and in terrifying circumstances. We had always feared the consequences of a severe flood in Mossdale, yet would never have believed we would live to see the day, nor have believed the enormity of the truth.

Our determination now was to see that the bodies of our friends were, in some manner, and with respect, buried within the cave rather than left to the uncertainties of recurrent floodings. Mostly we accepted the unreasonableness of any attempt to bring them out; a project which would certainly have taxed our resources beyond realistic limits. However, it was clear that the burial of the bodies within a readily accessible blind side aven, which lies close to where four of the victims were found, was a perfectly reasonable and practical proposition, given the further support of the rescue teams and the maintenance of the dam and diversion channel. Support from the already fatigued rescue teams was immediately forthcoming; three teams of six men each were organised for the morning to undertake this

arduous and distressing task and steps were taken to arrange for the aven to be sealed off and a memorial plaque placed within the cave.

By 09.00 hrs on the Wednesday, tired and still rather shocked men were greeted by rain, and a forecast of more to come; everyone waited. Then the on-lookers slowly filtered away and it became clear that the official intention was to withdraw support from any further activity within the cave. Accordingly a direct approach was made to the police at the scene with the request that the dam and diversion channel be maintained until such time as the weather conditions would reasonably permit the burial to be carried out. This request was rejected pending the decision of the Craven Coroner who, it was reported, would shortly be visiting the scene. Meanwhile support trickled away, and by 17.00 hrs when the Coroner finally appeared it was clear that there was insufficient manpower to complete the task in safety, even if the weather conditions had been favourable, and permission had been forthcoming.

At this time any further persons were prohibited from entering the cave for any purpose, including the recovery of some of the communications equipment. This step was taken by the police officers present, presumably acting on the decision of the Coroner. A considerable amount of unrest and dissatisfaction was felt by many of the rescue personnel, since understandably they felt that their best intentions were being frustrated. After some discussion with the Coroner to establish the location of the bodies and to confirm the rescuers opinion that retrieval of the bodies not realistic, it was decided that boulder obstruction should be placed in the New Entrance to prevent any unofficial entry of the cave. It was also stated that the earthworks and diversion channel would have to be removed by request of the landowner. It became quite clear that no further support for underground action could be expected from the police in charge. With the weather becoming very wet everyone withdrew from the scene, but many people still had every intention of taking steps to complete the task at the earliest possible opportunity.

In anticipation of this move it appears that instructions were given to prevent any further entry of the cave by the immediate removal of the dam and diversion channel and the 'sealing' of the New Entrance with concrete and boulders. This was carried out the following day, as far as the writer is aware in the absence of any further consultation with the rescue organisations or other persons with special knowledge of the cave; the dam was removed and the diversion channel filled in. Officially the cave had been 'sealed' and this was widely reported in the press.

The precipitate action taken in the 'permanent' blocking of the New Entrance to Mossdale and the removal of the diversion channel at once created new problems which had not been appreciated by the rescuers, police or Coroner during the short consultations on the Wednesday afternoon. The most serious consequence was that the potential rescue hazard

created by the closure of the New Entrance was vastly more severe than previously. The Lavatory Basin (Old) Entrance was still open and would be difficult to close, and although it had not been a usual method of entering the cave in recent times, it was perfectly negotiable in low water conditions. However, in high water it would very quickly become impassable, leading to the risk of persons becoming trapped under conditions in which entry and exit via the now closed New Entrance would have been perfectly reasonable. It was known to be very likely that additional entrances to the cave could be made at a number of other points in the 250 feet of shattered and unstable cliff face. Moreover, any such additional entrances would be more hazardous from the flood-trap point of view than the entrance which had now been closed. To attempt to seal off all 'possible' entrances to the system from the scar face or elsewhere is not thought to be a reasonable proposition and in the event of any party of cavers 'going missing' in the area or any actual situation requiring entry by search and rescue teams to this 5 mile system, these persons will at present be faced with a much more difficult and dangerous task than hitherto. Against this background there was the deep feeling of frustration and bitterness felt by all those who had worked so long and hard at the rescue attempt. Enormous effort by both men and machines had been expended in making the cave safe for rescue purposes and, apparently without any further detailed discussion with rescuers and cavers, this had been removed leaving a situation in which the cave is far more dangerous than previously and also effectively preventing any move towards a decent burial of the dead. Several attempts to negotiate at the official level were made at once but were all rebuffed, 'pending the inquest'.

The inquest was held in Skipton in July. A number of important facts emerged; notably the report of the Meteorological Office at Bawtry whose representative stated that they estimated that some 1.46 inches of rain fell in the Grassington area between 10.00 hrs on the Saturday and 10.00 on Sunday. Mr. L. Huff of U.W.F.R.A. in his report quotes rainfall figures obtained from Dr. G. Sweeting of Litton as being 0.75 inches between the hours of 17.00 and 20.00 on the Saturday. This was stated to be 'not unusual' and likely to occur in the month of June once in every one or two years. Further questioning revealed that some 95% of this fall occurred between 20.00 hrs, and midnight on the Saturday. Hence, there is no doubt that the rainfall which occurred was indeed exceptional even if it did not break any Met. Office records. Also, it was established that the party had consulted the weather forecast before entering the cave on the Saturday, and that they considered that the water levels at the Scar were very low at the time they entered the cave.

After a great deal of time had been spent establishing the identity and cause of death of the six men, the jury returned a verdict of 'Death by Misadventure' and added the rider that they considered the action taken by instruction of the Coroner (in sealing off the cave entrance) 'to be a very wise one'. This verdict was returned by a jury of laymen who had not heard one word of evidence or expert opinion as to the possible consequences of this action on future access to the cave and the flood hazard involved. This was the more remarkable

since prior to the inquest a statement making clear the rescue hazard which had been created by this closure had been circulated to the Coroner's Office, The West Riding Police, and The Home Office. The statement outlined the potential hazard, and recommended that the New Entrance to Mossdale should be opened, made safe, and gated with access to be closely controlled. This was arrived at after lengthy discussions with many of the rescue personnel, officials of the U.W.F.R.A., and had the formal support of both the B.S.A. and C.R.G. The existence of this expert opinion was ignored at the inquest, and subsequently a letter has been received from the Coroner's Office in which the views expressed are largely rejected and the authority of the writers questioned.

At the time of writing this seems to be where the matter rests, despite the fact that Mossdale Caverns are still accessible through the Old Entrance and hence presents a flood-trap danger far more severe than hitherto. Should such an emergency occur in the future, even if the New Entrance is re-opened, it is a sad reflection on all of us that there is no significantly greater chance of trapped cavers being rescued now than there was before the 24th June.

In 1953 a party of cavers became trapped in the Assembly Hall area of Mossdale as a result of the rise in level of Mossdale Beck, it did not rise to the levels which must have been reached on June 24th 1967, and the members of that party lived. Had the weather been otherwise it appears very likely that they would have been drowned. Following this incident the U.W.F.R.A. (in whose area Mossdale lies) approached the Fire Brigade for advice on the use of pumps in any future such emergency and they were told that the problem was far too great to be dealt with by this means; in the event this advice proved to be correct. Also, at that time, an approach was made to the presumed landowner of Mossdale, with a request to construct a diversion channel such as was done in June last. Permission was not given and it was pointed out that the diverted beck would flow onto other people's land. As a result of recent enquiries it has come to light that in fact Mossdale Scar and the cave entrance appear to lie on common land. In the event of the beck being diverted it would resume the course which, in recent geological times (Local information suggests that the beck has flowed past the Scar in recent historical times. The present cave entrances have arisen by stream capture, and this in turn has modified the existing passages.) it must have taken, traversing nothing but rough boggy moorland, to sink some quarter of a mile around the scarp of the hill.

Mossdale Caverns are officially 'sealed', the caves have become a tomb, five and a half miles long, and yet it is still possible to enter the system. It appears unlikely that it will ever be otherwise, nor, in the opinion of the writer, should it be. The caves remain; one of Britain's most extensive and complex systems. A fascinating example of a vast solutional network modified by vadose action all developed in a relatively thin limestone bed. We have scarcely begun to understand its complexities. It offers remarkable opportunities for the

explorer and cave morphologist alike. I do not believe that it will remain "sealed" and unvisited for all time, and if parties of cavers start to re-visit the system more deaths are likely to occur unless action is taken now to ensure that it cannot happen again. There is only one effective form which such action can take, and this should be clear to the reader from what has been presented to him in this report. A permanent dam and diversion channel should be constructed at Mossdale to make the cave 'safe' for future generations of cavers and speleologists. The writer accepts fully that all caves are intrinsically dangerous, but we do normally take measures to prevent hazards over which the caver has no control and the case of flooding at Mossdale Caverns is, in my opinion, one such situation.

In presenting this account of the disaster at Mossdale, I have tried to be accurate as to events, and I am grateful to Mr. Len Huff of the U.W.F.R.A. for the use of his official report of the operation. Such errors and omissions as I am sure exist are my own failing. There will be some who will find such an account distasteful, and feel that such tragic events are best left unrecorded except in the specialised records of the participant organisations. I cannot accept this view; and hope that we can learn from what has happened. All of us who were personally involved with this disaster are certainly much sadder, whether we are much wiser remains to be seen.

Note of the Author; Dr, Fincham has been a Wessex member for many years; is a past President of the Leeds University Speleological Society, and Chairman of the Leeds Area Team of the Cave Rescue Organisation.

Wessex Cave Club Journal No. 116, Vol 10. April 1968

MOSSDALE VOICES...

Jim Farnworths account Sunday 25th June 1967

My recollections are rather vague.

That weekend was a couple of weeks before teams were off to the Berger or Greece and final meetings were planned in the Marton Arms. This is why there were not more people on the trip.

I had spent Saturday in the Horton area with the Proventina mob on a cliff somewhere practising before meeting in the Marton Arms.

I got very pissed and they could not wake me when the callout came. In the morning they had left someone there to drive me across so having a night's sleep I was shoved into the team that went down.

I don't think Jim Eyre came down the Marathons with us He does not claim to have gone beyond Rough Chamber in the Independent article. I remember him in Rough Chamber when we returned. Jim Newton is likely to have been with us.

We were looking for five people.

Someone else stayed with me while I identified the first two bodies. However, I did not know Geoff Boireau and after moving them and crawling over them I was confused not to know one of them. However, the others returned as I was still trying to work it out and they said they had located the other three so who was who did not matter at that time as they were all accounted for.

We could do nothing else except return to let the surface know. Back at Rough Chamber, I'm sure Jim Eyre was there manning the phone, we started to debate if we could do anything further but he was adamant that we return to the surface, He didn't tell us of the likely hood of more rain.

When we got out the dam had grown considerably and water was lapping at the top with a couple of blokes led on it where it was nearly overflowing.

Shortly after Johnny Shepherd said there were six of them. I have a feeling we didn't know it was Oggie but am not certain.

I don't think either account is particularly wrong after all this time. In both their articles they admit that they were both stressed out. Tony left after finding the two bodies and Frank was in shock and has been troubled by it since.

Jim Eyre, I am sure stayed in Rough Chamber.

Tony could have been in front when the light was found as his description is detailed. I know Tony but I do not know Frank and don't exactly know who was with us. Tony left after finding the first bodies I don't think he would go alone. Frank Rayner, Jack Bloor and Jake Dickinson went on and found the other three, I'm sure Frank would remember this.





Frank Barnes account: 04.00 hours Sunday 25th June 1967

Conversation with Frank Barnes 2nd June 2016

Frank Barnes went down to Rough Chamber with Jim Eyre and Jimmy Cunningham to lay a telephone cable. They stayed there all day.

He was there when the party that had found the bodies returned and he spoke with Jim Farnworth. Jim was in a poor state and Frank had to ask him twice what they had found, Jim Muttered quietly “they are all dead”

Frank did not know Tony Waltham or Frank Rayner and cannot say if he met them in the cave during the rescue attempt.

Jim Cunningham’s account: 04.00 hours Sunday 25th June 1967

A group of us including Oggie, John Shep and me spent the night before Mossdale at a cottage owned by John’s current girlfriend – Barbara (?). She was the wife of a cave diver (can’t recall the name – I didn’t know him) who had been killed while cave diving some time earlier. I think the cottage was in Hardraw near the Green Dragon pub. I am not sure who else was there but it was likely Bill was with us. I am fairly sure the Leeds lot came up in the morning.

I never went beyond Rough Chamber. I was in a group of five or so who I think were first into the cave. We ran a telephone wire to Rough Chamber. I think Jim Eyre was in the party. We had been told not to pass Rough chamber and we waited there for several hours, willing the drips which sounded like footsteps to be footsteps. This was even though we realised that if they came they would be crawling, not walking. When they didn’t turn up I was convinced they were dead, as the cave had then been passable for at least 12 hours and I couldn’t see how they could all have been injured so that they couldn’t move. We finally went out – I can’t remember if Jim Eyre came out with us. My feeling is that he did. When I got out I was told not to go back in as it was likely I was traumatised. I did not go in again, though I was on the surface for several days.



Jim Cunningham talks to Ray Kershaw about entering Mossdale Caverns.

‘In Living Memory Mossdale Caves’ BBC 19th March 2008

You are immediately into a low passage where it isn't possible to pass. Its crawling, the whole cave most of it is crawling: there are just odd places that you can stand up. We slid down a narrow slot and then we crawled. The six had gone ahead because we weren't going as far as them and we couldn't have passed, so they all went down and then we followed them (pauses) never caught them up; never saw them again.

It was a difficult cave but most of it was miserable rather than difficult. It was long, lots of crawling, very easily flooded, no really big chambers and rarely was there that much to see. It was all the nastiest things about caves - we didn't know that much about it; it was purely what we had read and we went just as tourists, being taken by Dave Adamson who was one of the foremost experts' on that cave. He was planning to blast at the bottom to try and get through a passage that was very tight; they had taken explosives down with the idea of blasting in the passage at the bottom.

In the morning we had walked down to the river Wharfe, John Shep and I, and it was quite high. I had listened to the weather forecast so I did have worries about going in a cave like Mossdale, but Dave Adamson was a very experienced caver who had mapped the cave; he had advised in case of a flood that there were places to go where the water would not get you. It was his expertise that we were tapping into when we went down that cave.

The six that were going to the bottom needed to go in first, we followed them shortly after: we heard them ahead for a time but we never caught up with them. The girls didn't have wet-suits so we had planned in advance that we would go to Rough Chamber, which is a small chamber; smaller than a normal room in a house, and then come out again. That we did - we came out after three or four hours and the four of us walked back across the fell. I distinctly remember walking with Morag and it started raining, huge drops of rain and she was saying then that she was worried about Dave.

Jim Cunningham about waiting in Rough Chamber

We sat and waited for them to come out, we knew the water had dropped, we were still expected them to walk out. In caves you often get drips that can sound like footsteps. Time and time again it sounded like footsteps but we realised that they couldn't walk even if they were coming out they wouldn't be walking it was all crawling. The team came out again with the terrible news that they had found five bodies, they weren't sure who they hadn't found and obviously we were devastated.

John Ogden was still missing, Jim talks about John...

I had caved with him for four years; he was an excellent friend, very hard, very capable, he was an experienced diver. He was the sort of guy that had he been underwater for a time he might have been able to swim through to somewhere that was safe.

Jim Cunningham, John Shepherd, Morag Forbes and Collette lord entered the cave with the other six cavers but as was their intention, they visited Rough Chamber and then returned to the surface.

Jim Eyre's recording for Ray Kershaw.

Half an hour before midnight: my phone went, "there's six lads trapped down Mossdale" my blood went cold; I had a feeling that they were not going to come out alive.

Jim speaking about Boon and Livesey's trip to Far Stream Caverns 1963

Techniques of caving have changed since Bob's (Bob Leakey) day: wet suits, they could stand the cold and wet; they didn't need to cover themselves in mud and lie there, they could cave for hours and hours. They loaded themselves up with lots and lots of provisions and lights, enough to last for several days and they forced that cave. They got to a point where they had passed where Leakey had been, when they came out, hours and hours after: when the rest of the caving world got to know, they were really heroes; heroes of the hour.



Jim speaking about ULSAs exploration of Mossdale Caverns 1960 to 1967

Between them they worked weekend after weekend pushing this cave back and taking more and more risks. They were very fit, very hard lads, but I don't think that they appreciated the dangers that they were creeping into.

Jim speaking about the dead cavers

They even asked me the week before "why don't you come with us Jim?" I said no, I said I am basically a coward, and that cave frightens me to death." Oh you will be alright, if you know what you are doing; if you know what the weathers like, we've been down there that many times it will be alright, we will be alright" but (pause) I didn't go.

Jim speaking about Morag Forbes waiting for the cavers to return to the surface.

She went back to the cave and had a look again and to her horror, she couldn't see the entrance to the cave, it was underwater, several foot of water covered the entrance and she panicked. And the rain kept coming, getting heavier and heavier and the beck kept rising; so she panicked and she ran, the terrified young lass ran two miles to a farm and raised the alarm and called out the cave rescue.

Conditions at the cave

They had a ten foot dam built and it was rocking with the force of the water. A farmer had lent us a tractor with a shovel on the front, and it was holding this dam back: it was moving. So they strengthened the dam and built another dam in front of it, and meanwhile all these lads were digging these trenches, they spent the whole night digging and diverting water before it was possible to get into the cave. Still dangerous but we could get into it.

Mossdale caverns, a place I've avoided all my life (pause) and here I was on a rescue in a cave that was in imminent danger of being flooded to the roof, I was full of apprehension.

As this water dropped it became very still, no sound, in a cave like Mossdale where there is always water running, it's very unnatural, so we stopped and listened. The deeper we went into that cave, the more awful it became. (pause) I said "look we will split up here, six of us will go in and you six wait here" because I got the idea that, if we go down this tight passage if we meet somebody or somebody in trouble, we are all going to have to turn round and we are all going to be jammed up in this narrow space and with the threat of the flooding on top, I couldn't afford to risk all these lads being stuck in one small passage. By the time I had sorted the lads out saying, "you stop here" they just pushed passed; of course they were close friends. So I waited quite a while and nothing happened so I said "right we follow them in". We had gone quite a long way when I could hear voices and the lads were coming back, and I met Tony Waltham and his face was grey "go back Jim, they are all dead"

Jim speaking about the effort to find John Ogden

So I thought "could he have got to a high level place" you don't give up on a cave rescue. So another team went down, a fresh team, they couldn't find him, there was just five bodies (long pause) they didn't find John Ogden for two days. Then Brian Boardman went down on the Wednesday, I think, for a final look. He crawled over the bodies and he saw a pair of boots and a helmet: it was John Ogden. He had been washed up a crack, so that was that. It was out of the question to try to bring these people out, to work in those conditions in a tight cave like that. The Coroner decided that it would be right and proper to leave these bodies in there and seal the cave.

Jim Eyre speaking about the rescuers: "What a fine bunch of people"

Looking at that scene that night, over two hundred cavers some stripped to the waist, all working like fury to save their mates, I thought "what a fine bunch of people, if I had have been down there stuck, they would have been doing the same for me". They don't curse the fact that these lads went down when the weather was bad, they shouldn't have gone down they gave all to save them, I think that they are a great bunch of people.

Ray Kershaw: 'In Living Memory Mossdale Caves' BBC4 19th March 2008

Jim Newton Sunday 25th June 1967

I do remember that Tony (Waltham) was just in front of Jim Eyre, myself and several others and reported to us that he had found a body. He then used the radio to report that he had found a body and was told to come out immediately because it had started raining again. I remember crawling through the debris of the cavers belongings that had been washed off the bodies but after the radio instructions, I left with Tony, Jim and the rest of the group. I do not know Frank Rayner but maybe you will recognise him in the group photo.

John Rushton in Alan Brook's party Tuesday 27th June 1967

In order to save up for the forthcoming Berger expedition, I had decided to work overtime that weekend. I was installing railway lines at York Railway station. On reflection, it was

probably a good decision. Had I not been working, I would probably have taken part in the Mossdale trip myself.

It was only at breakfast time on the Monday, when I saw the headlines in the morning papers, that I realised there had been an accident. I drove up to Braida Garth and found out the state of play from the guys who had returned from Mossdale. I gathered my caving gear and proceeded to the cave entrance. At that time, five of the six bodies had been found and



were named as Dave Adamson, Geoff Boireau, Michael Ryan, Bill Frakes and John Ogden. The sixth Colin Vickers, as it was thought at the time, had not yet been discovered. The coroner had decided that as only five of the six had been found, the next party down had to either discover the sixth body or positively identify the five. As the deceased was made up of cavers from different clubs, the search party must also consist of cavers from those clubs in order to carry out the identification. I was chosen as a member of the Wanderers.

From memory there were six cavers who descended, led by Dave Brook. His is the only one I can remember and that is the only time I have ever been underground with Dave. When we reached the junction of Leakey's Marathon (Far Marathon West) and Far Marathon East we split into two parties of three. I was in the party with Alan Brook who proceeded through Far Marathon East. It was in here we discovered the first body. This was identified by the others as Geoff Boireau. We carried on and after the two passages came back together we were rejoined by the other three cavers. On the return journey through Far Marathon East we discovered the other bodies and began to make a positive identification.

On carrying out the identification process, I discovered that the body previously named as John Ogden was, in fact, Colin Vickers. They were of a similar stature. I also identified Bill Frakes. Michael Ryan and Dave Adamson were identified by others in the party. We attempted to find the sixth body (John Ogden) but without success. We returned to the surface to report our findings. I never entered the cave again and John Ogden's body was discovered sometime over the next couple of days.

John Sinclair in Dave Brook's party Tuesday 27th June 1967

That weekend in June 1967 Sandra and I were with Ken Pearce, Ann, and their son Edward who Sandra reminds me had chicken pox. We were all camping on the Llyn Peninsula in Wales testing the mixture diving gear for the Berger expedition. We remember the heavy rain on the Saturday passing near Chester as the road was flooded.

We heard of the Mossdale flood and had concern for some caving friends on our return from Wales on the Sunday evening, but still exhausted from Wales decided to wait until Monday morning to see

if the situation had resolved. Gerry Beard was off work with a badly damaged hand and as the news was no better we decided to go up to Mossdale on my Vespa Scooter. We left the bike in Conistone and jogged up to Mossdale, you will remember we were all very fit in those days.

Bob Leakey was at the entrance and very distressed about the situation. He asked us to call out the guys, so we reversed course, drove back on the scooter and contacted Ken Pearce, also my brother David who called out his own expedition Team. Gerry Beard and I loaded his Landrover and headed back to Conistone where we met with Jed Scott and many others, and at the cave we helped with the setting up of the control centre marquee.

I remember we had more than one trip into the entrance series so that we could familiarise ourselves with the layout of the cave.

The weather improved on Tuesday and after a meeting with the coroner and a senior police officer, a new search party was set up. This consisted of Dave Brook, Alan Brook, Dave Cobley, John Rushton, John Sinclair and John Trott. We were requested to not only look for the sixth missing person (John Ogden) but also to bring back proof the other five cavers were within the cave, and we were to bring out transportable personal possessions from the missing cavers for Identification.

A large Support Party spread from the cave entrance to various points within the cave. Ken Pearce and Jed Scott remained at Rough Chamber as support, and the final group of six split into two Teams with Dave Brook, Dave Cobley and John Sinclair on one team and Alan Brook, John Rushton and John Trott on the other team.

One team negotiated Far Marathon East and the other team went down Leakey's Marathon (Far Marathon West) both teams uniting at the junction just before the chimney into the High-Level Mud Caverns. The five missing cavers were located here and personal possessions were collected to remove from Mossdale for the coroner. John Ogden was not located although the two teams also searched extensively as far as Mud Caverns South, but to no avail. The search party then left the cave with the collected personal possessions for the coroner.

We then attended a debriefing meeting with the coroner and the senior police officer. At the meeting, the coroner decided that the missing cavers' bodies were to remain in Mossdale which would be sealed after further searches for John Ogden which would be planned for another day.

We packed what we could then drove back to the Manchester area, feeling so very sad and devastated over the tragic loss of our friends.

My time at Mossdale Monday 27th June 1967 by Mick Melvin

On Saturday 24th June 1967 I had just collected a second hand car and I had made a decision to go caving on the next day and take a run out in my new car.

On Saturday night I was caught out in the torrential thunder storm that passed through Yorkshire and thought that the chances of a caving trip on the Sunday would not be good. I drove up to the top

of Wharfedale to Langstrothdale with some caving friends but quickly realised that going underground in the flood conditions that prevailed would be out of the question, instead we had a walk onto Horse Head Moor.

As I drove back through upper Wharfedale in the late afternoon passing Kilnsey Crag, I saw a number of Fire Engines parked on the bridge over the Wharfe at Conistone.

The idea that the presence of Fire Engines might somehow be connected to my friends, whom I knew had planned a trip down Mossdale for that day, never entered my mind. I thought that the high water conditions may have flooded somebody's home and the Fire Brigade were there to pump them out.

When I arrived home and was having my tea I saw on the news that there was an incident at Mossdale with a number of fatalities. My heart was in my mouth as I went to the public phone at the bottom of the road where I lived and rang Roger Sutcliffe, who at that time was the contact for the Bradford section team of C.R.O. of which I was the underground leader. Roger confirmed that the ongoing rescue attempt was for Bill Frakes, John Ogden and my other friends and that the police had been trying to get the team together since early morning.

Roger told me that I needed to go to the police station on Bolling Road in Bradford very early next morning, Monday 26th June to where the Bradford Team would assemble and be taken up to Mossdale.

When the team arrived in Conistone we were transferred to a Landrover and taken up to the cave. I have a clear memory of meeting Jack Pickup, who was a good friend and fellow member of the Happy Wanderer's coming down the track toward me in another Landrover. Jack was very despondent and told me that all the lads were dead with the exception of John Ogden and that it did not look very good for him. I continued up to the cave with the members of the Bradford team.

Arriving at the cave the scene resembled what I imagined a Klondike gold field to look like during

the gold rush time. There were tents everywhere and heavy machines working; two rows of Coventry Climax pumps working continuously pumping water from the dam. People were in the river shoring up the dam and filling sandbags. Large diameter hose pipes were snaking across the area in front of the cave and discharging huge jets of water away from the entrance.

I quickly made my way across to Brian Boardman whom I knew well, he informed me that I was on stand-by along with some other members of the Wanderer's whom had already been underground and were now resting between shifts. Later I joined with other members of the Wanderer's working on the dams and filling sandbags. Occasionally we would be called over to the cave entrance to be



informed of the outcome of the latest team to go in and search for John Ogden. We were fed by a team from the W.V.S. and the first night I slept in a large tent that had been erected for that purpose.

During Tuesday we had some disturbing news; a crutch strap from John Ogden's wet suit had been found close to the other bodies. The wet suit belonged to Dorothy Clegg and she confirmed that John had been wearing it. Dorothy was inconsolable.

Late on Tuesday evening a group of us including me, Kenny Taylor, Bob Gillibrand and Randy Coe were told to get kitted up and prepare to go underground in the event that John Ogden's body was not found by the latest party to search for him; a team led by Brian Boardman. We were to be the very last team to be sent into the cave. We were still on stand-by when in the early hours of Wednesday 28th June Brian Boardman came on the telephone from Rough Chamber to say that he had found John's body where he had forced himself upwards into a tight rift, he was very close to the other cavers who had perished with him.

When Brian and his party returned to the surface Ken Pearce came to speak with us and told us that no one would be allowed back into the cave to evacuate the bodies. The coroner, Mr Stephen Brown and the police had made this decision. Many people were furious at this suggestion as we had expected to be allowed to recover our friends and bring their bodies out and return them to their loved ones. No amount of arguing would change the coroner's mind and he was determined to seal the cave for good. Later that day wheelbarrow loads of earth and rocks were tipped into the cave entrance and soil thrown over the top. Several members of the Happy Wanderers and University of Leeds Speleological Association were still fuming over the coroner's decision when we left for our homes later that day.

Bob Gillibrand Sunday 25th June 1967

I first heard of the Cave Rescue Organisation call out when the late Barbara Green rang about 9.30 Sunday morning. She told me that Oggie and some other friends were thought to be in difficulties in Mossdale Caverns and that the callout was asking for people with knowledge of Mossdale Caverns. I had been with Ken Pearce and others a few years earlier when we took lead diving weights and digging gear as far as Rough Chamber to prepare for a later attempt. Owing to various commitments I did not take part on that trip and I learnt later it was foiled because of the weather.

I drove up to Conistone and parked outside the then post office and set off up the track; on the way, I was picked up by a Landrover. On arriving at the cave I saw quite a few people in sleeping bags who had worked all night. I checked in at Cave mouth and mentioned I knew the route to Rough Chamber, but was told they needed people familiar with the far reaches of the cave. I worked on the site then for about one or two hours before being asked to take a reel of phone wire towards Rough Chamber with two others. I had only just got down the entrance when my light conked out. I decided to carry on, but then two guys coming towards us took the wire and went back into the cave. I came out with one of my companions.

Next, I worked with George Houghton who was operating one of the JCB machines on the outer dam. He was trying to get large buckets of turf to reinforce the face as the whole dam was only a bank of peat and shingle, with any large stones and boulders that were unearthed placed in front.

In the afternoon a party of us was up on top of the scar above the cave mouth, I cannot remember what we were doing; possibly rigging a communications aerial? When we got back down all work had stopped and people were gathered in little groups about the site. I spotted John Southworth and asked what was going on, he came over and said very quietly, that the lads had been found and they were all dead. At this stage, the Police Inspector in charge announced that all work was suspended until Monday morning.

I went home on Sunday night and I was back at the cave at about 9.00 a.m. on Monday morning. I was a bit unsettled what with the bad news and also before leaving home I had rung my friend Les Lord, who after leaving Mossdale on Sunday had gone straight to work at Deerplay Colliery. It was a hard message to send when the police said no attempt would be made that day to recover the bodies due to weather conditions. I slogged about the site which was developing into a mud bath with all the 4 wheel drive traffic. About mid-afternoon shouts and noises came from upstream where the fire service had several Coventry Climax pumps working. When we looked, the pumps were being overwhelmed by the beck which had risen ten inches in ten minutes and was still rising. There was no rain where we were, but there must have been a storm on the fells above; panic and chaos.



Jack Pickup commandeered about thirty of us to help pull George's JCB free; he was working in two feet of water and was unable to see the deep hole that his machine had dropped into. He had two pumps in the front bucket and one in the Back actor; and was unable to push himself free. We pulled and the rope broke leaving us all on our backs, George ditched the pump in the Back actor and used the Back actor to free himself. Meanwhile, everybody was trying to raise the outer dam height, as the water rose higher a human chain filled and passed sandbags along the top of the dam. Authorities on the cave side of the dam could not see the water level in the outer dam and started remonstrating when the much lower inner dam was being ransacked of sandbags.

We had to explain that if the outer dam went it would fill the cave again. The water was already up to the original dam top when the call came. As the search party was out of the cave we urged people to continue working at the dam; about an hour later the work was stopped while the dam was sorted. When I awoke, still on site Tuesday morning, the Army had sent engineers to lay metal track way on the disintegrating access track and provided hundreds of sandbags. The Army sandbags were much better than the county council ones which were treated with rot proofing which made them very stiff ,difficult to tie, and hard to tamp together. As a result, most of Tuesday was spent filling and reinforcing the dam with sandbags.

A huge Ford Dutra 4 wheel drive tractor arrived ferrying, even more, pumps to the site. The station commander in charge was test running the pumps three minutes in every hour, very reassuring after the previous days scare. Also, the WVS arrived with about six field kitchens and distributed food for the two or three hundred people on the site. They were led by teachers from Eshton Hall with immaculate makeup at 6am in the morning!

I was approached by Bob Leakey who wanted to get a team together to take a rope and start dragging the bodies out. I thought this would be organised by the authorities when Oggie was found. A number of search teams were being organised, and I was down to follow Brian Boardman's team that evening if Oggie was not found, led I think by Randy Coe. Quite a few of us had been fixed up with lamps from Deerplay Colliery. The man in charge of the lamp room risked his job to send these via Les Lord; it would have taken days to go through the proper channels.

However, the sad news came about one a.m. on Wednesday morning that Oggie had been found. All I can recall after this, that in the morning the Police Inspector announcing the decision not to recover the bodies of our friends and the escalating public money costs as the land owner wanted the beck reinstating to its original course. I remember when I got home I slept for nineteen hours.

JED Scott's account of the search for John Ogden

Jed Scott, a very experienced and tough caver, was working as a firefighter at Altringham Fire Station on the morning of Tuesday, June 27th, 1967. On that Morning he took a call from Ken Pearce. "Could he get off and go to Mossdale" he could and he did.

Jed had been a vital member of the British caving team that exceeded the world cave depth record in August 1963 when Ken Pearce passed the terminal sump in The Gouffre Berger; then the deepest known cave in the world and extended the depth of the known cave.

At Mossdale Caverns 27th June 1967 the team with Jed Scott consisted of Ken Pearce, Bobby Toogood, John Sinclair, Noel Booth, and Dr Hugh Kidd.

From: JT Scott 127
B4.
28th June 1967

**The Chief Fire Officer
GHQ
Special Leave Granted**

I submit that on the morning of the 27th June I was released from duty at the request of Dr Ken Pearce to assist in the search for a sixth missing caver in the Mossdale Caverns Wharfedale Yorkshire.

This caver's five comrades had all been found late Sunday but in the absence of a sixth body, it was believed by a number of people, that a more detailed search should be mounted as soon as weather conditions would permit.

We arrived at the cave mouth at approx. 1500 and proceeded to dress for the descent which was started at 1630. At approx. 1900 we met up with a Leeds University team who had established that the missing caver was not to be found in any of the small number of places where he might have conceivably escaped the floods downstream of his colleagues'. We searched passages in the vicinity of the five bodies for two hours without success and finally set off towards the surface at 2300.

On arriving out at 0100 the opinions of all five members of the team were that, due to the risks involved, the removal of the five bodies, and the sixth if found would not be justified and therefore our presence at the cave now being of no importance we packed up and drove home, arriving at 0500.

I would like to express my appreciation of the assistance given by the officer concerned in releasing me from duty.

Signed J. T. Scott

John Conway's Account, Monday 26th June 1967.

Phil Wilson of the NEG and I and a couple of other cavers who's names I cannot now recall after 50 years, were part of Bob Leakey's party that went underground on Monday morning to look for John Ogden.

Previously on the Sunday evening, myself and some NEG lads were returning home from a weekend caving in the Dales, and driving past the Police Station in Settle saw the CRO sign displayed. In these early days this was a method of contacting cavers passing through Settle (this was pre Settle bypass days) that there was a cave rescue incident in progress. We were told that five cavers had been drowned in Mossdale Cavern and that one caver was unaccounted for and that we should make our way to the cave on Monday to resume the search for the missing caver. We carried on home and I stay at a friend's (Rod Plant NEG) house in Clitheroe, and the following morning Monday, we made our way up to Mossdale.

Bob Leakey formed a small team of cavers with me, Phil Wilson and a couple of others to go underground and resume the search for John Ogden. It was only when the police man at the entrance writing down the names of those going underground and the names of their next of kin that I thought about the possible seriousness of this trip along with the remnants of flood debris in parts of the entrance series. Bob also spent some time showing us one or two possible safe areas if flooding was to occur in the entrance series which only enhanced the risk. Somewhere between "The Swim" and "Boulder Hall" Bob made the decision that only he and I should continue into the area beyond "Rough Chamber. In Rough Chamber Bob again showed me the "Great Aven" saying that it was a safe area in case of a flood.

Somewhere at the start of the crawls Bob asked me to wait while he continued to search on his own and that if the water level was to start to rise I was to rush further into the crawls and shout a warning to him.

I waited for what seemed to be several hours, going back to look at the Great Aven and the main passage then back to sit in the dark and look to see if the water was rising on a little pile of pebbles I'd made. At some point I decided that I'd return to the surface and change my CRO lamp, I'd no back up light, and then return and find Bob. Returning to the surface was easier than I thought and having exchange my lamp for a new one I joined another rescue team entering the cave with a telephone and wire.

At some point around Boulder Hall and Broadway, at the time I'd no idea what the names of these passages were and neither had I seen a survey of the cave, our team met up with Bob and words were exchanged. I was a little disappointed that Bob didn't recognize me, but I carried on with the lads laying the telephone line and I found that they also had a couple of boxes of food. At some point before or at Rough Chamber while checking the telephone line to the surface, we were told to return to the surface as quickly as possible because the little stream had now become a big stream and there were possible problems with the dam diverting the water away from the entrance.

We all emerged from what now had become a wet entrance to a great deal of surface activity around the dam; a JCB had appeared and was now involved in propping up the dam. That was it for the rest of the day and also my involvement with the rescue. After the body of John Ogden was found on the Tuesday/Wednesday the rescue was run down and the authorities made the decision that it was too dangerous to recover the bodies and the cave was to be closed.

Post Script

In 1969 I had the chance to meet up with Bob Leakey to talk about our pending expedition to the Himalayas and when I mentioned Mossdale he didn't seem to want to talk about it, so I let it pass and hoped that he didn't think too badly of me leaving him, all be it was just to get another light.

4th June 2017, this is my account as I remember it.

Anthony Roberts owner of the shooting rights describes Mossdale Caverns

Its four and a half miles up a fairly rough track, and although we could get our farming vehicles up there, it was impossible to get any of the fire services up there. All the farmers provided their Land Rovers and some Tractors to put the pumps on. The fire services first priority was to try to pump away as much of the flood water as they could.

After that they brought in a lot of metal tracking which they laid down in order to get bigger vehicles right up onto the site.

The decision to seal the cave

We all supported that because we felt it would have been unfortunate to have tried to get the bodies out and reinterred them on the grounds of safety really. The fact that it was sealed as a grave would have deterred other people from trying to go down and explore the cave system.

Permission to remove the bodies

It was really a question of trying to get them higher up in the system so they wouldn't get washed away by waters. It was all done on a totally unofficial basis, there was no written correspondence about it, and I think that it was all done verbally. We gave our permission for them to go down, it certainly wasn't publicised. I got the feeling that the least publicity at that time the better.

Are you aware that cavers had been going down the cave since 1967?

No I am certainly not and if it had been happening on a regular basis I'm sure that the gamekeepers who are up there nearly every day of the year would have seen some signs of it. I am not saying that it has never happened but I think that it is highly unlikely that it has happened very often. I know that there is a linking pothole somewhere on what they call Black Edge, and this may well be where potholers are accessing it now rather than going down the main cave entrance.

Robert Lambert tenant Farmer

They put steel roads in all the way up, and seeing it to what it was before they, altered all the structure of the stream where it comes down the fell to try to divert it, it was a completely different piece of scenery.

Referring to the rescuers

I really admired those lads, because probably if they had done risk assessment as they do now, nobody would have been allowed down. Their only priority, which it always had been, was to get them out if they possibly could.

On whether permission to visit the cave should still be granted

We don't grant permission, I'm not saying that people can't find a way in somewhere. Experience tells me that if you say no, it's every encouragement for somebody to go in by illegal means; but if we say no the onus isn't on us if another tragedy happens. The rivers rise that fast on the fell, it comes from rain and a little stream soon becomes within half an hour a raging torrent. Everything disappears down Mossdale, I mean everything. Everything that I know about Mossdale, I would want to say no!

Ray Kershaw 'In Living Memory Mossdale Caves' BBC4 19th March 2008

AFTER THE TRAGEDY

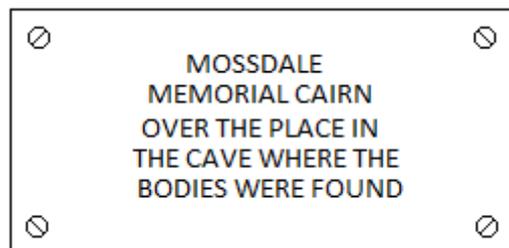
THE MOSSDALE MEMORIAL CAIRN by Alan Brook

About 2 weeks after the Mossdale incident David Brook, Alan Brook and Dave Weston went to Mossdale Scar with tape, compass, clino and notepad. We knew the Bearing and the distance from the entrance to Rough Chamber. We surveyed the line with Dave Brook on tape and notepad, Alan on compass and clino and Dave Weston on line spotter duty and clino correction surveyor. On arriving at the Rough Chamber position we were spot on for the stake marking the induction phone link to Rough Chamber down below. We now knew the bearing and distance to the point in the cave where the bodies were found. We surveyed to the correct position a little before Priests Tarn on a flat area of moor. A stake was placed at the spot and some rocks from Priests Tarn brought to pile around the stake. The game keeper for this area was Joe Cussins who had allowed ULSA to use How Gill Nick hut as a base for Mossdale trips.



Over the next six months I spent many weekends ferrying rocks from Priests Tarn to the stake using a heavy duty canvas rucksack. I would build up the cairn but other cavers reported seeking Mr Mallinson, the Mossdale gamekeeper, attempting to knock down the cairn. When the cairn had been rebuilt to its present height a group of ULSA cavers including Dave Brook, Alan Brook and Dave Weston took some limestone rocks with good fossils in them from Mossdale Scar to top out the Mossdale Memorial Cairn. After a few years I made a small brass plaque and screwed it to a squarish block on the cairn. At first the cairn sank into the peat but stabilised after a few years.

Several years after fixing the plaque a contributor of walks for 'The Dalesman' found the cairn and included it in a walk on Grassington Moor for 'The Dalesman'. There was a photograph of the cairn and the inscription on the plaque was quoted followed by the words "there is nothing more to say". The inscription on the plaque reads:



BURYING THE BODIES

MOSSDALE CAVERNS 1971 by Dave Brook

Because it was known that several entrances, though unsafe and flood-labile, permitted access to the cavern of Mossdale Scar, the Club wanted to bury the remains of its friends who had perished there in 1967. The C.N.C.C. were therefore informed of the proposals and were asked to investigate the legal aspects surrounding the cave and its human remains. Was the cave now regarded as a tomb and, if so, must it remain inviolate? By whose authority had the entrance been sealed and were there any laws forbidding its reopening?

News of the investigation leaked to the Press through the C.N.C.C. agenda and subsequent comment resulted in much distress to the parents of the six Mossdale victims. Since this had been the last thing club members had wished for, it was decided not to trouble the parents initially in case it was found that nothing could be done, thus letting them down after raising hopes.

Enquiries at the Home Office and with the Coroner and the Police revealed that none had any jurisdiction in Mossdale matters. It transpired that the seal (which has no legal significance) had been put in after consultation with the C.R.O. and the U.W.F.R.A. during the rescue attempts. Both rescue organisations now agreed that, with respect to future explorations, the system was more dangerous with the seal than without it. However, the removal of the blockage would have to be negotiated with the "landowner".

At this juncture, U.W.F.R.A. and U.L.S.A. cavers met the parents and explained their intention of burying the remains of the six cavers. Unanimously, the parents gave their consent and blessing to the scheme and asked that the landowner's permission be sought. With no danger to the burial party and with as little fuss as possible, the remains were to be buried in the Mud Caverns.

The entrance to Mossdale Cavern lies in the Common of Conistone Moor and hence no-one actually owns it. The farmers in the area are gate-holders and they possess the grazing rights. The shooting rights over the moor lie with Mr. Roberts. At a gate-holders' meeting the majority were totally opposed to any further exploration of the Cavern because they were afraid that the 1967 incident might be repeated. However, they did agree to the burial proposals - provided that the entrance was resealed afterwards.

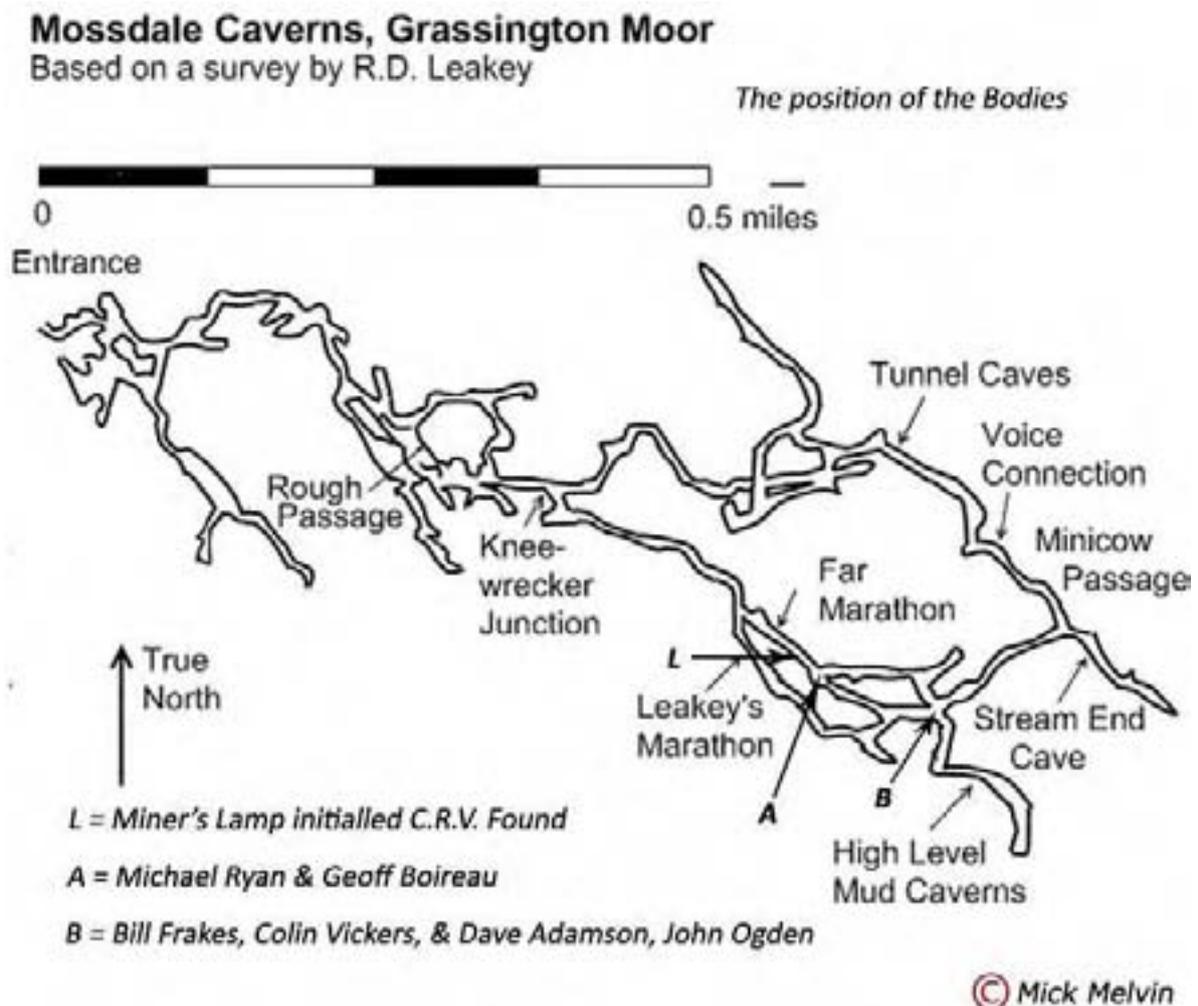
With the red tape severed, the task itself was straight forward, although unenviable. It was carried out by nine Club members, eight underground and one on the surface, during a dry spell in February. There was no fear of prior (or even subsequent) publicity since only the individuals involved knew what was going on. The "sealed" New Entrance was not used.

Now that the task is complete and all the remains have been buried it is hoped that the parents feel a little easier. All cavers will be relieved and our six friends would have been in agreement (and also horrified at the previous fuss).

The present situation at Mossdale Scar has been unchanged for four years. The only safe entrance is blocked by boulders and could not be opened without the gateholders' permission. All other entrances are unstable and prone to flooding. It is only because of the flooding hazard that Mossdale Cavern is dangerous. The cave is the Everest of British caving - the ultimate challenge of future exploration - but there is no reason why it should become the Eiger as well. The final solution to the flooding hazard would be the construction, on the Conistone track, of a bridge and sluice which could be operated when a party was down the cave. Any unexpected cloudburst could then be diverted and a repetition of another tragedy prevented.

DAVE BROOK (U.L.S.A.)

Brook, Dave (July 1971). "Mossdale Caverns 1971". *University of Leeds Speleological Association Review* (8): 24, 25.



BIOGRAPHIES: by Mick Melvin

Bill Frakes, John Ogden.

The first time Bill Frakes came to my attention was an item in the Bradford local paper about a 17 year old boy scout from Eldwick near Bingley free diving the static sump in Elbolton Cave. Afterwards Bill joined the BPC and I then came into contact with him via Pete Livesey in 1964.

I always believed that I was responsible for introducing Bill to John Ogden and John Southworth and the Wanderers. During 1965 I think, Bill Frakes, Colin Vickers, Mick Ormerod, Dave Stewart, and I were training with diving gear in a deep pool in the river bed below Keld Head when a Landrover drew up alongside. Len Platt was driving and John Ogden and John Southworth: both whom I knew climbed out and came to meet and have a chat with us. Later we came together to form the Northern Section of CDG, and all of us would in the future partner Oggie and Bill on many cave dives.



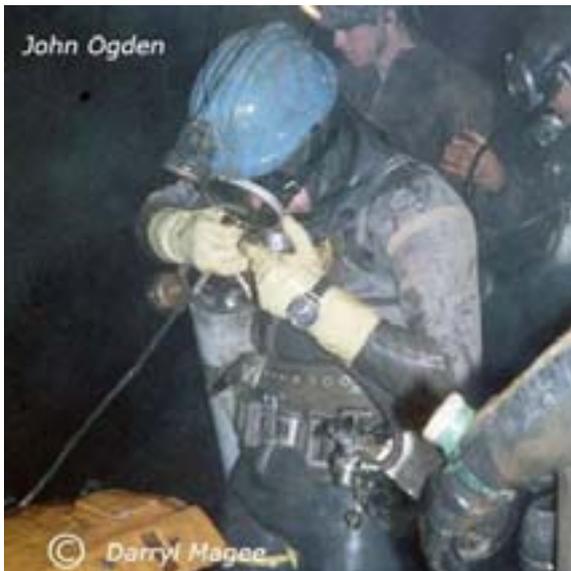
John Ogden always known as Oggie to his friends was an apprentice engineer who lived in Colne. He and Frank Barnes, another prominent member of the Happy Wanderers grew up together and were childhood friends. He was a quiet thoughtful young man who never pushed himself to the front of the party, but he was always ready to push a little bit harder if it was required.

Bill and Oggie attended a number of the Northern CDG dive training sessions at Keighley Baths during 1965 and also they were with a group of us from the Wanderers at Malham Tarn, when Ken Pearce (who was the diving officer of the Northern CDG) assessed us for our cave diving qualification. Shortly after that, they became a two man team and carried out many dives together. Some of the dives that we did as a team were in Langstroth cave, where we put in many hours ferrying the poles through the sumps to scale the 45 foot aven. In Skirwith Cave 1966 Bill and Oggie together with a number of us; all divers from the Wanderers carried out a series of dives in the final sumps of this difficult cave. Bill and John Southworth dived the last sump for a distance of 150 feet before having to turn back at an underwater choke.

In May 1966 for three consecutive weeks a large group of wanderers members turned up at Malham Cove where Oggie, Bill, Dave Stewart and John Southworth passed an underwater constriction about 70 feet in from the entrance, which had previously proved impassable to

divers using rebreathing apparatus, completing a distance of 150 foot. In doing so set the scene for future diving activity here.

In September Oggie did a fine exploratory dive at Deepdale rising. In May 1966 Oggie, Dave Stewart and I passed a tight sump in Great Douk to emerge in the newly discovered Southerscales pot. Prior to the dive when we were discussing who would dive first, Oggie spit on a flat stone and tossed this in the air; the wet stone being a substitute for a coin. In 1966 a large group of the Wanderers went down to Bristol University to the BSA conference. The first night Oggie and I shared a sleeping bag camping out on the green space above the Avon Gorge. But on the second night Oliver Lloyd let us sleep on the floor at his house. I remember Oggie having some fun with a large moose's head fixed to the wall in Oliver's lounge.



Bill was an apprentice joiner with his Dads building firm (Frakes and Wigglesworth). He was quite a good poet sometime scribbling a poem whilst sat talking.

The last time I saw Bill was on the Thursday before he died. He met me at the water treatment plant where I was working. He planned to assist me to dive into a deep tank to recover some equipment that had been dropped in.

Bill was quite a charismatic character; he was continually joking and very good fun to be

with. He did his first cave dive with me in Langstroth Cave in November 1965 and I can tell a story of him joking before the dive.

The cave passage as you come up to the first sump is a water filled canal, with the roof of the cave sloping downwards into the water and forming the 45ft. sump. After I had donned my diving gear I submerged myself in the canal leading to the sump to test my headlight, air supply and buoyancy. I felt a tap on my helmet and raised myself up to see what had happened. Bill who was standing in the canal next to me asked "what are you doing "I am checking out my gear before the dive" At this he muttered something about me wasting air and he began to sing the words of the latest release by the Rolling Stones (The Last Time) I include this anecdote, simply to reveal the humour of the man.

Michael Ryan by Mick Melvin

Although Michael Ryan had some caving experience when he joined the Bradford Pothole Club in 1967; he was however a comparative newcomer to caving. He attended the Bradford Pothole Club's winch meet at Gaping Gill early that year, and as a result of that experience, he rapidly became an enthusiastic caver.

The weekend following his trip down Gaping Gill he accompanied a team of cavers from the Bradford Pothole Club, to the far end of Ingleborough cave (Terminal Lake) and in doing so proved himself to be a very competent caver.

He gained a reputation for himself as a very willing helper at the Club's hostel in Brackenbotttom, but he was always keen to go caving. The week before the fateful Mossdale trip, Michael went down Meregill hole with Bill and Colin. Because he showed a natural aptitude for caving, he was invited along on the Mossdale trip and considered to be a valuable addition to the team that sadly perished in the cave.

Michael, who was seventeen at the time of his death and the youngest member of the team, had been a pupil at Bingley Grammar School near to where he lived with his family in Allerton, Bradford.

Dave Adamson by Dave Brook

Dave was one of the founding members of ULSA in 1965. He graduated with an English degree from the University of Leeds and taught in a Leeds school. Earlier he joined the Leeds University Union Speleological Society and became involved in Alan Fincham and John Robey's project to survey Mossdale Caverns.

He took part in new explorations in Ouroborous and Minicow passages and was in the team that established the sound connection between the extended Minicow and Tunnel Caves in the Kneewrecker Series.

Away from Mossdale he was involved in the early work in Marble Sink and exploration of the Cascade Inlet leading to Toyland in the West Kingsdale system.

Colin Vickers by Mick Melvin.

I knew Colin as a member of the Bradford Cave Rescue team formed in 1960 to assist the Main C.R.O. team if required. We helped out on many practise rescues together and he came with the team to Wales when we were searching for some students missing in a mine. He was a particular friend of Pete Livesey and I believe he was introduced to Bill Frakes through their mutual friendship.

After leaving school Colin joined the tax office in Bradford, shortly before he died he worked at International harvesters where he made parts for the tractors'.

Colin was the only one of the deceased cavers to have a child. Rachel was 18 months old at the time of the

Mossdale tragedy. In 2014 Rachel made contact with me and I arranged for her to make her



first visit to the cave. This was done with the assistance of Dave Nelson and Pete Huff of UWFRAs who provided the team's Landrover to get her to the cave.

Biography of Geoff Boireau by John Comer

The death of my friend Geoff Boireau is a fact of history, now some 50 years in the past. We both left the Royal Grammar School, High Wycombe, in summer 1961 and met up again at Leeds University at the freshers' conference. We joined the Trog soc and, for reasons beyond recall, we also joined the Society for Psychological Research. We were both post-Christian boys looking for a flaw in the materialistic view of the world, both fantastical, if unassuming, idealists, very positive, and perhaps wondered if some very good things were up ahead of us, if only we could figure out what they were. In any case, we could always meet in the Union bar, although I have to say that Geoff was more a Union Bar buff than I was.

Geoff married Judith in August 1965 and moved to Manchester to teach sociology and philosophy at St John's College. By this time his interest in caving had developed into an obsession. He joined up with others keen on discovering new cave systems, and I listened to his accounts with some amazement of trogs spending their weekends underground up in the Dales, moving boulders aside, allegedly using gelignite, in order to follow the cave systems down where the water flowed. I have a feeling that in Mossdale Geoff and his friends were hoping to push the system and be the first to enter these hitherto-unknown regions, and to have their names attributed to them. It was exciting, but it's also true that a certain common-sense world vanished and in its place emerged a pure arena of discovery and achievement. This was trogging, higher-order trogging, a world with high aesthetic and aspirational goals.

Trogging was just beginning to discover neoprene, wet suits, and all the paraphernalia. Carbide lamps were the norm. Cold, wet, sogging boiler suits with lots of woolly jumpers were standard; electric lamps a rarity. I realized that you could either be a member of this newly-emerging society or not. I wasn't. Geoff was. Geoff embraced it. He told me that if he died he would want to die trogging. This was a measure of his idealism.

A memorial service was held at the tiny Conistone church a few weeks after Mossdale, attended by his mother, a widow, his wife Judith and her father, and personal friends, which included many trogs outside in the churchyard, in what was a gloomy and dispirited scene where misadventure had visited us all.

MEMORIAL SERVICE IN ST MARY'S CHURCH CONISTONE TWO WEEKS AFTER TRAGEDY

The weekend after the disaster, a memorial service was held at St Mary's Church, Conistone. A jury inquest recorded a verdict of death by misadventure.

CONCLUSION: Mick Melvin

I would like to make it clear that this conclusion is my own opinion and not the opinion of any association or organisation.

How did it happen?

On the morning of June 24th 1967 a group of ten cavers met in the Cafe Royal in Grassington Main Square (now called Annie & Betty's) to discuss their imminent visit to the far reaches of Mossdale Caverns.

The group were aware of the weather forecast for that day: thunder storms for late in the afternoon, expected mainly in the south of the country. That weekend was preceded by a prolonged dry spell of weather in the Yorkshire Dales and the moor tops were quite dried out. Up to that point, June was considered to have been a dry month.

The Guardian: The Weather Forecast for Saturday 24th June 1967

Cloudy with Rain at times

A depression S.W. of Ireland will slowly move north and associated troughs of low pressure will cross all parts of British Isles.

England, Wales, and Northern Ireland and South Scotland will be cloudy with rain at times which will turn thundery in many places during the afternoon. Warm in the South East near normal elsewhere; Lake District, Isle of Man, North East England, Borders, North West Scotland, Northern Ireland: Cloudy rain at times, thunder in places, Mostly Dry in the evening: wind S.E. moderate mostly, locally fresh, normal temperatures, maximum 17C. (63F).

Despite this, a discussion took place regarding the safety of the forthcoming trip into Mossdale Caverns. The general opinion amongst the six very experienced cavers, who were to go to the end of the known cave (Far Stream End Caverns), was that it would be safe to do so. The expectation was that if it did rain, they knew of safe places within the cave where they could sit out any flood waters. The remaining four cavers only intended to go as far as Rough Chamber and return to the surface.

Shortly after the party entered the cave they split into two parties, six in one and four in the other. The six cavers in the first party weren't seen alive again. No one knows what happened after the parties separated, the rest is speculation.

What is known, from subsequent visits to the blockage at the end of Far Stream End Caverns, is that the party reached there safely and carried out a small explosion in an attempt to push further into the cave. The group were well aware of the need to leave the cave and not to return to view the results of the explosion, and it is safe to assume that they began their journey out immediately after detonating the explosives.

The Wall of Water Theory

Conventional thinking is that on the way out of the cave, the cavers were most likely overwhelmed by a wall of water coming down Far Marathon East toward them.

The stream sinking at the foot of Mossdale Scar and entering the cave is last seen at the constricted end of Syphon Passage. It is now thought that when the capacity of Syphon Passage is exceeded by a rise in flood water entering the cave, the water backs up and then takes an alternative course and goes down the Marathons. The wall of water that swept down the Marathon passages in June 1967 drowning six experienced cavers, was almost certainly caused by a flash flood, the volume of which was increased by recently dug drainage channels on the moor above the cave known as 'moorland gripping'.

Moorland Gripping

In the early sixties, in the false belief that they would benefit both livestock living on the moor and the grouse population, drainage channels known as 'grips' were constructed extensively in Upper Wharfedale. We now know that this 'Moorland Gripping' has done little to increase the productivity of vegetation. Instead, it has resulted in detrimental disturbance of the natural hydrology, damaged the plant communities, caused erosion of the moorlands through over-deepening of grips, increased silt deposition in downstream rivers and increased the likelihood of flash flooding. (1)

I personally have seen the effects of a flash flood magnified by the construction of Moorland Grips'. In the spring of 1965 a group of us which included John Ogden, Bill Frakes and Colin Vickers, three of the cavers who died in the Mossdale Caverns tragedy: had planned a trip down Hull Pot on Pen-y-ghent. The idea was to look at the terminal sump and the possibility of diving it at a future date. When we arrived at the large surface opening that is the entrance to Hull Pot, the weather had deteriorated to heavy rain so we decided to remain in the large entrance chasm and explore about for a while.

As the rain became heavier and developed into a deluge, a huge wave of water suddenly and without any warning poured over the edge of the shaft where there is normally a small stream. Within a few minutes the water in the entrance had become ten to twelve feet deep and we were able to swim around.

This incident concerned me enough to write an article for the Cave Research Group newsletter in order to alert the caving fraternity to the danger of flash flooding due to moorland gripping. (2)

I would recommend anyone interested in the danger to cavers from flash flooding to read the document produced by the British Caving Association. (3)

Could it have been prevented?

In 1956 a delegation of leaders from the Upper Wharfedale Fell Rescue Association met with the late W.D. Roberts and discussed with him the problems of a Mossdale rescue,

particularly in times of flood. They asked for permission to dig a long deep channel to divert the water away from the cave entrance.

Permission was not granted as the person thought to be the landowner at that time would not permit this, as the diversion would have involved diverting the stream onto other peoples land. The application was not pressed and it simply faded away. Moreover, the caverns had been closed for some time due to movement in the large boulder fall at the entrance.

I believe that it is fair to speculate that had such a diversion channel existed in June 1967 it would not have saved the lives of the cavers.

During the 1967 attempt, to prevent the rescue parties from being overtaken by flood water, there was at one time, at least four JCBs/bulldozers and 200 people manning the dams which had been constructed outside the cave and even then, it came very close to being overwhelmed.

Some people might say that the cavers should not have been in the cave as thunder storms were forecast for other parts of the country and we know that the weather is notoriously unpredictable.

There had been some rain over the Grassington area in the previous few days, but the moors appeared dry and the quantity of water entering the cave was well below normal. The weather forecast for the north had been noted as 'bright periods, chance of thundery showers'. Dave Adamson was, of course a well respected caver and a known expert on Mossdale Caverns. Dave knew of places within the cave where, in most cases of flooding it would be considered safe to sit it out. At that time it was not suspected that the capacity of Syphon Passage to take the flood waters could be so completely overloaded during a deluge.

Untapped potential in Mossdale Caverns

The potential for discovering many more miles of cave in the Mossdale system is, in my opinion unique in Britain. The system is unique in that the cave drainage is constrained initially within the Yoredale Limestone, but then breaks through into the underlying Great Scar Limestone, resurging about 230 m below at Black Keld close to the base of the limestone succession. For a more detailed article on this, please read: The Black Keld Catchment Area. (4)

The caving fraternity is very aware of the potential dangers of working for long periods at the end of Mossdale Cavern. It is only because of the flooding hazard that Mossdale Cavern is dangerous. The cave is the Everest of British caving -the ultimate challenge of future exploration - but there is no reason why it should become the Eiger as well. The final solution to the flooding hazard would be the construction, on the Conistone track, of a bridge and sluice which could be operated when a party was down the cave. Any unexpected cloudburst could then be diverted and a repetition of another tragedy prevented. (5)

Letter from Mrs Adamson to the Home Secretary Circa 1970: Dave Adamson's mother

I have managed to keep a sane view on Mossdale by asking myself what David would wish me to do about his interests. Would he have wanted to keep others out? Would he want to deter others from gaining the knowledge that he sought?

I know he would say "carry on and the lessons learnt, apply them".

- (1) University of Hertfordshire, 2011. *'Moorland Grip Blocking'*
- (2) M.A. Melvin *'Moorland Gripping and Cave Flooding'*
Cave Research Group of Gt. Britain (CRG): Newsletter 98 (1965)
- (3) *'Weather and its Effect on Caves'* a Guide for Cavers
British Caving association December 2011
- (4) http://www.sssi.naturalengland.org.uk/citation/citation_photo/2000376.pdf
- (5) Brook, Dave (July 1971). *"Some Aspects of Moorland Gripping"*. University of Leeds Speleological Association Review (8): 6, 7.



Moorland Gripping in Upper Wharfedale

Unknown Photographer

APPENDICES

THE BLACK KELD CATCHMENT AREA with PERMISSION FROM NATURAL ENGLAND

Date Notified: 16 February 1999

County: North Yorkshire **Site Name** Black Keld Catchment Area

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act, 1981. (as amended)

Local Planning Authority: North Yorkshire County Council, Yorkshire Dales National Park, Craven District Council

National Grid Reference: SE 010700

Ordnance Survey Sheet 1:50,000: 98 **1:10,000:** SD 96 NE, SD 97 SE, SE 06 NW, SE 07 SE, SW

Area: 1401.3 (ha) 3461.21 (ac)

First Notified: 16 February 1999

Description and Reasons for Notification:

The site covers an extensive area of Conistone Moor and Grassington Moor to the south-west of Great Whernside and approximately 6 km north of Grassington. Two major cave systems, Langcliffe Pot and Mossdale Caverns are present and together, these caverns consist of over 20 kilometres of passages. The underground drainage system which feeds the stream resurgence at Black Keld is one of the largest and deepest in Britain, although only a small proportion of its cave passages are accessible at present.

The system is unique in that the cave drainage is constrained initially within the Yoredale Limestones, but then breaks through into the underlying Great Scar Limestone, resurging about 160 m below at Black Keld close to the base of the limestone succession. These cave systems therefore breach the intervening shales and sandstones which normally act as aquicludes. These breaches are a response to geological controls, and result from the penetration of stream ways through open tectonic fissures, small faults, major fractures, and zones where the Middle Limestone and Great Scar Limestone have been brought into lateral contact with each other through displacement along faults. Drainage within the vadose zone of the cave system is constrained by the south-easterly dip of the limestones, however, the resurgence of Black Keld lies to the north-west of the sinks of either cave system.

The patterns of passages in both Langcliffe Pot and Mossdale Caverns are unusual for cave systems within the Yoredale Limestones, and Mossdale Caverns has a divergent branching pattern which resembles the pattern of a phreatic maze in its complexity, and as such, the caverns are regarded as important examples of maze caves.

Other Information:

This is a Geological Conservation Review Site.

Explanatory Geological Note:

The purpose of this note is to describe the nature and importance of the site, avoiding specialist terms, for the site owner and/or occupier. This note does not form part of the formal notification documents.

Black Keld Catchment Area, North Yorkshire:

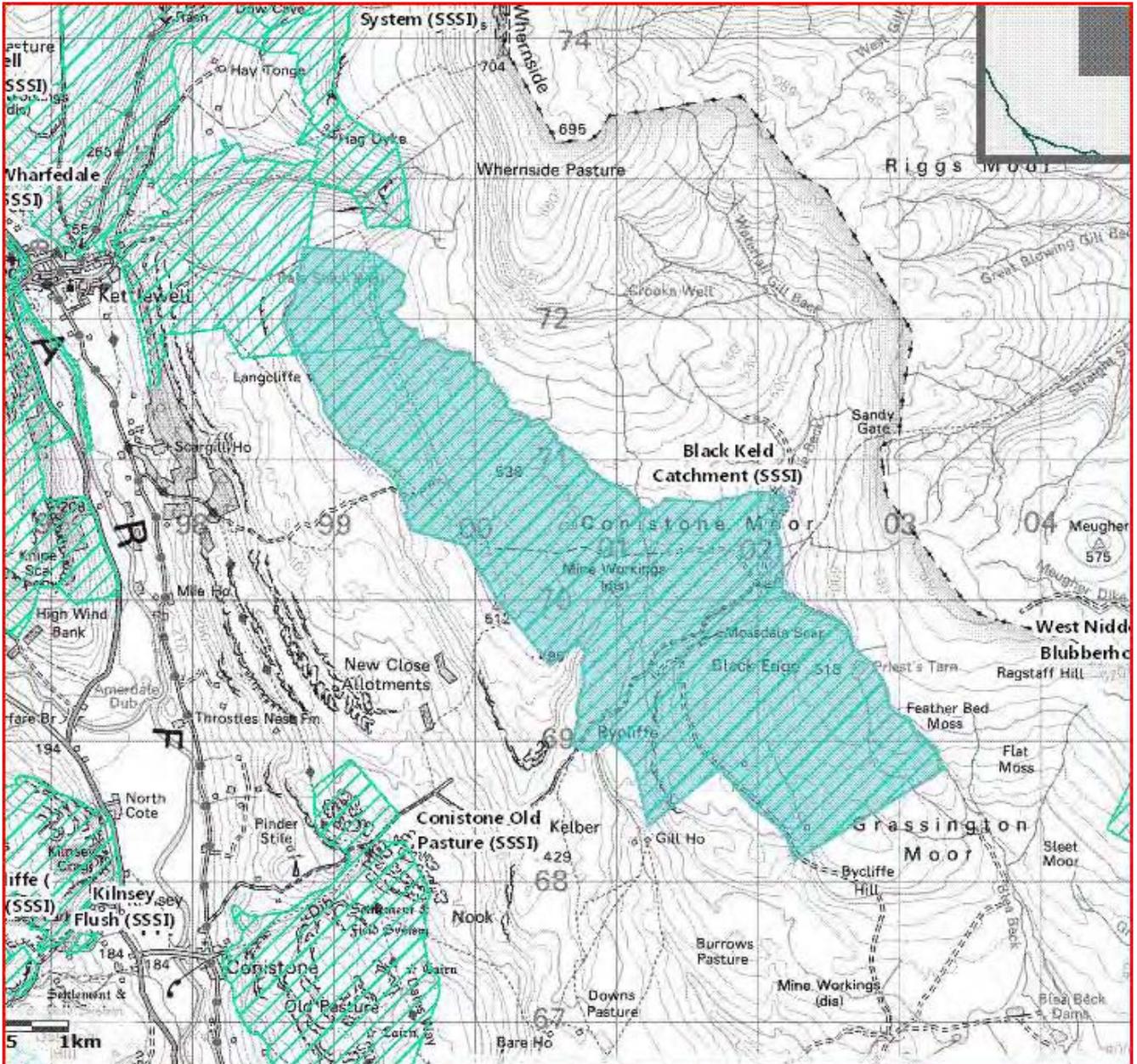
The cave system occupies an area of approximately 1400 hectares on Conistone Moor and Grassington Moor, about 6 kilometres north of Grassington. Two major cave systems, Langcliffe Pot in the north and Mosssdale Caverns in the south, together comprising 21 kilometres of explored passages underlie this area.

Water enters Mosssdale Caverns where Mosssdale Beck sinks at Mosssdale Scar. From there it follows a complex sequence of passageways in a general south-easterly direction, eventually disappearing beyond **chokes** or blockages. Water enters Langcliffe Pot through several **sinks** and again follows a south-easterly route. Again, the passageways become blocked.

The placing of marker dyes in waters of these two systems has demonstrated that the water emerges at the **resurgence** of Black Keld in the floor of Wharfedale to the north and east of the two cave systems and in a direction almost opposite that of the stream flow within the caves. In addition, the limestone bed in which the **resurgence** is located in geological strata approximately 280 metres below the strata the **sinks** reside in. The rocks surrounding the caves consist of alternating layers of **limestone, shale** and **sandstone**. The caves passages are developed in the **limestones** where water passing through cracks in the limestone has dissolved the limestone and over a long period of time, opened the cracks into passages. Neither the **shales** or the **sandstones** are susceptible to dissolution by water, nor will they easily allow the passage of water through them. As the **shales** and **sandstones** intervene between the limestone bands, water should not be able to penetrate through this succession of rocks. Black Keld Catchment area clearly demonstrates the effect that **geological structure** can have on the development of cave systems.

The rocks over much of the area dip to the south-east and the cave passages have an overall trend in this direction. The cave streams have broken through the shales and sandstones along weakened zones that were fractured because the rocks had been displaced by **faults**. Two of these **faulted zones** may be seen in Langcliffe Pot where the stream has broken through the **shales** and **sandstones** and entered a lower layer of limestone. **Faults** have also been responsible for displacing different layers of limestone and bringing them in contact with each other, by passing the **shales** and **sandstones** in between.

Black Keld Catchment Area is of importance in demonstrating the effects of **geological structure** on the development of a cave system.



BLACK KELD CATCHMENT AREA MAP

BLACK KELD AND ASSOCIATED LOW LEVEL CAVES by John Cordingley

Black Keld, the rising for many of the potholes on the east side of lower Wharfedale (including Langcliffe Pot and Mossdale Caverns), is the biggest in the Dales. It first attracted the attention of Cave Diving Group members as early as 1949. Major advances were not made until fairly recently, for two main reasons. There has been a long history of restricted or no access here and the visibility is usually atrocious due to heavily peat stained water (the clue being in the name, *Black Keld*!).

The diving starts from the resurgence pool and a branch line is soon passed off to the right which surfaces in Lake 1, an extensive airspace. Continuing along the main line leads to air in

Lake 2 at 119 m from daylight. In low water conditions it is possible to follow dry (high level) passages between these two lakes. Sump 2 is entered from Lake 2 and is 60 m long, with some quite awkward underwater terrain, involving a difficult restriction. This surfaces in Lake 3, from where a bedding and a canal enter an impressive vadose section with knee deep water, heading generally eastwards. Some 200 m from the end of Sump 2 is a junction where a separate series of passages heads off to the right (southwards), involving further sumps and ending in various terminations either at boulder chokes or where it becomes too low. Back in the main route, some 237 m beyond the end of Sump 2, the short Sump 3 is met (easily free dived). Sump 4 soon follows, surfacing in another lake chamber which leads to the 640 m long Sump 5 after 10 m.

The initial part of Sump 4 weaves about where initial route-finding was far from straight forwards. Soon a south easterly trending section is gained and this direction is maintained all the way to where air is reached. A fine streamway section is entered, up to 20 m high and 3 m to 4 m wide, eventually ending at Sump 6. This is a 475 m dive, often in a spacious passage with occasional large airbells but also some deeper sections (maximum -21 m) and some areas of more difficult route finding due to sediment banks and complex passage forms. A large lake airbell follows, 35 m long and at least 7 m high.

Sump 7 comes next, 60 m long to a short section of streamway followed by Sump 8, soon surfacing in a 10 m high streamway. Several small cascades lead, via a larger 4 m waterfall, eventually to Sump 9 after a total of 350 m of fine passage. This gives a shallow 50 m long dive. More streamway follows, including a further 3 m cascade, leading to (the terminal) Sump 10. It has been dived to a point 140 m in at 25 m depth. The way on from here is wide open and involves 1450 m of diving from the entrance to reach. The end of the cave is some 2 km ESE from the resurgence pool and roughly 500 m from the entrance to Langcliffe Pot. However Black Keld needs to be explored considerably further before it will approach connections with the end of Langcliffe (and the end of Mossdale Caverns is even further away).

Two other caves explored by divers are probably associated with Black Keld. 300 m down valley is a normally static pool at the entrance to White Keld, a south eastwards trending system containing seven sumps, characterised by very clear visibility. This is because the cave carries mainly percolation water (although it is possible that some of the water from the Mossdale and Langcliffe area formerly flowed through it). The current end of White Keld is well short of the end of Black Keld and the final section of the former trends more down valley. Nearby is Spring Trap Cave; this is a smaller cave by comparison and it includes a couple of short sumps which divide, with the best way on not being obvious. Its clear water may be fed from an outlet partway along the passages in White Keld.

Much more detail is available in “Caves of Grassington Moor” (pages 27.1 – 27.14) by D.Brook and P.Murphy, which is Chapter 27 in the BCRA book: ***Caves & Karst of the Yorkshire Dales, Part 2*** (Ed A C Waltham & D J Lowe). This chapter is already available online (details on BCA website) and the printed book is expected to appear during 2017. Another valuable source of information (which includes larger scale surveys) is the Cave Diving Group’s ***Northern Sump Index 2015***.

Please note that the access situation at each of Black Keld, White Keld and Spring Trap Cave is fragile. It is ***essential*** that anyone interested in visiting (even just on the surface) should first contact the Northern Section of the Cave Diving Group for up to date information. Failure to comply with the landowner’s wishes could easily lead to a total ban, as has been the case previously.

John Cordingley (December 2016)

Black Keld Resurgence Wharfedale



After a short while it began to rain much more heavily and she became worried. Another visit was made to Mossdale, when she found the level of the beck has risen enormously, and the whole area in front of the Scar was a sheet of water. She had no idea of the exact time of her last visit, but it would be between 20.30 hours and 21.30 hours.

The first rescue party arrived at Mossdale at about 01.15 hours, and found conditions worse than Miss Forbes had described. There was a huge lake in front of the Scar, and the entrance was under about four feet of water and starting to silt up. The main party arrived at 01.30 hours with the obvious object of diverting water from the entrance and clearing the debris.

Huff and Baker arrived at 02.20 hours from Yarnbury with a negative report. By 02.25 hours the team had succeeded in gaining access to the cave, therefore Des Birch led a party underground to explore conditions. More pumps were sent for; also the Settle—Ingleton team and the Leeds Police Sub-Aqua team were called out, the latter for breathing apparatus and recharging equipment only.

At 03.30 hours, D. Birch and team surfaced reporting that the water was still very high, with evidence of severe flooding; froth enveloping the roof several inches thick throughout the Near Series.

Mechanical diggers and other equipment were sent for to divert the whole stream down Bycliffe. This meant digging a trench 130 yards long, at least eight feet deep and sufficiently wide to take Mossdale Beck in flood. After this had been completed a dam was to be laid across the stream to make a complete diversion and thus reduce the water in the cave, and provide a safety factor for rescue teams. Furthermore, it would give the trapped men an opportunity to get out providing all was well. Met. reports were asked for at hourly intervals.

From 04.00 hours, teams were going into and out of the cave trying to establish communications from the cave entrance to Rough Chamber. There was no appreciable fall of water in the cave until about 11.00 hours, during which time food had to be prepared for those underground and on the surface.

Throughout the morning difficulty was experienced with telephone wires previously laid by the University of Leeds Speleological Association and those supplementing them, and much time and effort was spent before establishing reasonable contact with Rough Chamber at about 12.10 hours.

The first search team, led by Frank Rayner, entered the system at 12.40 hours to explore as far as "Far Marathon Passage". At 13.25 hours, a second search party, led by A. Milner, was sent in to explore "Far Marathon West Passages". Another search party followed the previous one to search High Level Mud Passages and Far Stream Sink Chamber.

From 14.15 hours support teams were being sent in with food and flasks and relief for those on telephone points at Blackpool Sands and Rough Chamber. By this time there were 200 people working on the dam wall and cutting the water channel.

At 17.20 hours Jim Eyre reported five bodies had been located in the Far Marathon Passage, therefore D. Birch decided to evacuate the cave except for materials. The Police were informed, also the parents of the deceased, who were then taken down to Conistone. Information of this kind was not sent over the radio link in case the tragic news should leak out before all the relatives had been informed.

The cave had been cleared of all personnel by 18.10 hours and the weather became worse. There was another thunderstorm and rain fell heavily.

We were originally called out to search for five men and after five had been located, news filtered through that there were six men in the original party. This was confirmed after Shepherd had surfaced at 18.10 hours. John Shepherd was one who entered the Caverns at 14.00 hours on Saturday, 24th June, with Miss Forbes and two others.

All personnel left the scene only to return on the Monday.

Owing to the heavy rain during the night, it was found that the dam had been breached in two places, and a five-point plan had to be made before any further search and recovery work could commence.

1. Strengthen the dams
2. Widen the new water course.
3. Build a secondary dam.
4. Establish telephone link with Rough Chamber or Kneewrecker Junction.
5. Rough Chamber to be a point to accumulate men and material and an advance base for search and recovery teams.

It became obvious that it was necessary to have more expert advice on building dams as it was to be the crux of the operations. Mr. M. H. Long (British Speleological Association) who had had considerable experience on sea wall construction, undertook the job of strengthening the dam. The County and District Surveyors, Messrs. Fortune and Seddon, were asked to visit the scene and give advice, and supply materials as required. Dr. H. Lord, Safety in Mines Research Establishment, and Derbyshire C.R.O., was sent for to provide better communications with his 'Inductor' phones and Search Coils in order to establish the exact whereabouts of the bodies in relation to the surface and give early warning to those beyond Rough Chamber of the onset of bad weather.

The Met. report for the day was "fine and dry until 6 a.m. the following morning, when the weather would deteriorate considerably until the following afternoon -then showers with bright intervals". By 12.30 hours work underground was going well with D. Birch attempting to establish points 4 and 5 of his plan, when it was noticed that the sky to the North-East began to fill with dark thunder clouds. These dark clouds extended round to South and North-West, and by 14.00 hours it began to rain fast but not heavily.

Des Birch was kept informed every 10 minutes, and when it began to rain he decided to withdraw twenty underground men back to "Blackpool Sands" from Rough Chamber, and on the safe side of deep water. In fact seven men were sent out, leaving fourteen to stay and watch the effects of the storm on the water and find out if it was entering the caves from unknown sources. It rained for two hours then became fair, and work underground recommenced. At 16.30 hours news was flashed that the stream had risen approximately four feet in half an hour.

The underground teams were warned of the danger and requested to evacuate. At this point it was noticed that everyone was working very hard filling sandbags, some people using their bare hands, others running with sandbags as pumps became swamped by the rapidly rising waters. Fifteen minutes later the water was only inches below the top of the dam. Two machines were hurriedly placed against the dam wall, and people continued working chest high in water to recover the pumps.

The cave was cleared of rescuers at 17.10 hours. Some experts were questioned on the chances of the sixth man still being alive. Three of those who know the system well said "1 chance in 200".

With such unpredictable storms it was necessary to build the dam 10 ft high and 15 ft. thick, also to be followed by a secondary dam 6ft. high and 6 ft. Thick from the central buttress to the eastern buttress. This dam would give rescue teams a chance to get out from Blackpool Sands should the first dam become defective.

Until these dams had been completed, work underground was suspended. The Settle-Ingleton team arrived and consolidated equipment for a dig from the surface at Black Edge Pot, hoping to reach a high aven shown on the survey near to Rough Chamber.

Tuesday, 27th June, 1967.

At daybreak the digging party started on their mammoth task at Black Edge Pot and further work on the dam was resumed. All teams were given two hours only beyond Rough Chamber and then to report back and telephone from Rough Chamber. The first underground party on this day was sent in about 13.00 hours and followed by other teams. At 15.15 hours D. Brook led the first search party and covered practically the whole of the far reaches of the cave in an unsuccessful attempt to locate the sixth man, then known to be John Ogden. They were also asked to recover loose equipment belonging to the deceased for identification. At 16.30 hours they reached and identified the bodies of William Frakes, Colin Vickers and David Adamson, who were all known to Brook. They went to Far Stream Sink and observed some work which had been done by the deceased and then returned. On their return journey they noticed the body of Geoff Boireau, who Brook knew, and the body of another man he did not know but thought was Michael Ryan. About 100ft. nearer the cave entrance from the two bodies, he found a potholing lamp with the initials of "C.R.V." stamped on it. Whilst examining the bodies of Frakes, Vickers and Adamson, a neoprene crutch strap had been found hanging from the roof, which did not belong to any of the three bodies, but he omitted to check against Ryan and Boireau.

At 17.15 hours Dr. Hugh Kidd and Ken Pearce of the Derbyshire C.R.O. and experts in their own rights, entered the cave with the specific object to check the crutch strap recovered by Brook against the two remaining bodies, assess the extent of their injuries, the manner in which they met their deaths and the feasibility of recovering the bodies. It was also to incorporate a continued search for the missing man. The first body Dr. Kidd examined was lying on its face in the middle of a 4-5 ft. wide passage. This man was Ryan and had been dead about 72 hours.

Rigor mortis had passed off completely. Boireau was nearby and both showed external signs of death from asphyxia due to drowning. About 400 ft. along a constricted difficult Passage to a point marked 'T Junction' on the map, he found three bodies all having been dead some 72 hours and showing external signs of asphyxia due to drowning. The man with a beard (Adamson) had a deep cut on the left side of his head but he didn't know if this had occurred before or after death. None of the bodies had any sign of major injury. He was also able to establish the crutch strap found by Brook's party did not belong to any of the five bodies. Dr. Kidd and Pearce unanimously agreed that to recover these bodies would be a tremendous physical task, a long one and fraught with dangers to the rescuers. One point between Rough Chamber and Kneewrecker Junction would cause considerable difficulty and probably require blasting.

Brook's party surfaced about 19.30 hours and Kidd and Pearce surfaced at 21.00 hours. From evidence given by Brook, Dr. Kidd and Pearce, and by plotting on the survey the positions of the recovered equipment, it suggested the deceased were caught by sudden excessive flooding a few hundred feet nearer the cave entrance than where the first bodies were found. It also suggested the bodies of Adamson, Frakes and Vickers had been washed down to the position at 'T Junction'; some 500 ft. Furthermore, the crutch piece had now been identified as that being worn by the missing man, John Ogden.

Meanwhile, Alan Fincham organised search parties for different parts of the system with particular emphasis on places where Ogden might be found. A meeting was called by Huff to explain to Chief Inspector Scott, Messrs. Fincham, Hainsworth and Long, the advice given by Dr. Kidd and Pearce, to suggest leaving the bodies in the cave. It was an unsatisfactory end to the tremendous efforts but was accepted as the only course of action left open.

The last search party, led by Brian Boardman, entered the cave about 22.00 hours; their specific task being to search Near Kneewrecker and the two loops in Near Marathon Passage. There were six in his party, two for each specified place. Boardman went on to locate the five bodies, and whilst he was investigating the area by the three bodies, he observed a small passage at right angles to the one he was in. He had to crawl over the bodies to allow investigation. He found the passage too tight to negotiate, but noticed a considerable amount of silting up; he also noticed a boot with tied laces, then another boot, both with socks, and also a white helmet.

All were about 15 ft. away. He knew Ogden was wearing a white helmet and he also knew him personally and thought he would have fought to get into, and up, this small side passage away from the water, which accounts for the position of the body. Confirmation was telephoned by Boardman to Huff at 3.10 hours Wednesday morning, and he was asked to completely evacuate the cave of personnel, but leave in equipment.

Des Birch, Alan Fincham, Malcolm Budd, Harry Long and Barry Greenwood suggested it would be better to move all these bodies to a small side passage and bury them in a shallow grave and seal it off. This was considered the best we could do except to accept an offer, made by someone through the Police, for the use of a drilling machine capable of sinking a 32" diameter shaft. This was accepted, therefore Dr. Lord's party were asked to enter about 10.00 hours Wednesday and locate the relative position on the surface. Huff, Hainsworth and others surveyed the moor behind the Caverns for a likely place to bring a heavy machine. We later learned that the person offering this machine had no authority to do so, but we could have it at £50 per hour. The weight of the machine and truck is 56 tons; the heaviest component being about 36 tons. This, then, was out of the question, due to the soft nature of the ground which would have to be traversed.

By 08.00 hours, weather conditions deteriorated considerably and heavy rain began to fall. Later that day, Reg Hainsworth considered conditions unfavourable for work at Far Marathon Passage, and Superintendent Glendinning, with the Coroner, discussed with Hainsworth, Fincham, Boardman and Coe and those who had been taking part, that sealing of the entrance was the best thing under the circumstances, and finally restore the countryside by destroying the dams and filling in the new water-course. This work was completed within the next day or so.

"NEVER HAS SO MUCH BEEN DONE BY SO MANY PEOPLE FOR SUCH A SMALL REWARD"

- o -- o--o-- o-- o -- o -- o -- o -- o -- o -- o--o-- o-- o -- o -- o -- o -- o -- o --

Those dead are:

David Adamson,
Lofthouse Place,
Leeds.

Geoffrey Boireau,
Fearnlea Crescent,
Swinton.

William Frakes,
Eldwick,
Bingley.

John Ogden,
Cuerden St,
Colne.

Michael Ryan,
Dean Close,
Bradford.

Colin Vickers,
Kenley Mount,
Bradford.

The others who went underground at 14.00 hours on 24th June, 1967, with the above but returned on reaching Rough Chamber and subsequently surfaced at 17.00 hours were:-

Morag Forbes, Collette Lord, James Cunningham, John Shepherd.

- o -- o--o-- o-- o -- o -- o -- o -- o -- o -- o--o-- o-- o -- o -- o -- o -- o -- o --

Conclusion

In 1956 Messrs. Len Huff, Don Robinson and Wally Keay visited the late W.D. Roberts and discussed with him the problems of a Mossdale rescue, particularly in times of flood. We also pressed for permission to dig a long deep channel to divert the water, but he could not permit this as it involved other people. We now know that this cave is on common Land and permission to enter these caves need not be sought from Mr. Roberts. This gentleman's son now owns the game rights and most of the grazing rights, but does this restrict access to a cave? Another point which did not emphasise our case was the fact that only one rescue had been carried out at Mossdale up to the time of our visit (U.W.F.R.A. Operation 37, 26th July, 1953). True, that also was due to flood water, but to a far lesser degree than was experienced on 24th June 1967.

The application was not pressed and it simply faded away.⁸ Moreover, the caverns had been closed for some time due to movement in the large boulder fall at the entrance.

Professor G. Sweeting at the Litton Meteorological Office Station says the rainfall on Saturday, 24th June, was 1.12 inches: $\frac{3}{4}$ inch fell between the hours of 17.00 and 20.00. One inch of rain equals 22,630 gallons per acre, and Mossdale has an approximate gathering ground of 1,500 acres, which was already wet, hence water running straight off, and aided by gripping (surface drainage).

Once Mossdale Caverns have been re-opened or worse still, when people use the original entrance, which is at present available, the problems of rescue are far greater than the Mossdale effort of 24th June and the subsequent few days. The entrance used by the deceased and the rescuers was the new or east entrance, which as I have already quoted, is now sealed. Should another rescue ever have to be launched at Mossdale through rising waters, mechanical diggers and machines of that nature, also the Fire Service with pumps must be a first priority. I would certainly consider the use of helicopters to lift larger pumps to the scene.

Up to date, Inductor telephones and Search Coils should be acquired by rescue teams who have large cave systems in their area.

With one last reference to Mossdale, I was very sorry that the diversion channel was destroyed. All that was required was to block the upstream entrance and leave the rest open, or make two small bridges to permit livestock to pass from one part of the moor to another. The trench could have been fenced off with pig netting to prevent animals getting in. Even if they did, then a ramp on the upstream side, and an open entry at the bottom, would suffice. There are far greater dangers on the moors with the presence of disused mine shafts and gripping deepened by age.

Where new super severe caves are being found, it would be wise to pass on to the rescue teams a survey of that system and the names and addresses of those who surveyed it, as they will be the people who will have to play a leading role in recovery work in that particular system.

I am sure much has been learned from such tragic circumstances and it might not be a bad thing if we re-considered techniques for such large scale activities, remembering it is not one particular team doing it - we are all in it together, and the responsibility of trying to save lives rests with us all.

The Mossdale Caverns Tragedy

Saturday 24th June, Sunday 25th June, Monday 26th June,

Tuesday 27th June, Wednesday 28th June 1967.

Those taking part were:—

Upper Wharfedale Fell Rescue Association.

Cave Rescue Organisation (all 10 teams)

West Rising Constabulary (Skipton Division)

R. A. F. Mountain Rescue Team, Leeming, Yorkshire.

Teams from the Lancashire Mountain Accident Panel.

West Riding county Fire Service.

West Riding County Ambulance Service.

Leeds City Police Frogmen.

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West Riding Constabulary Cadet Training Team.

Scargill House, Kettlewell (food and personnel).

Bewerley Park Outdoor Pursuits Centre, Pateley Bridge.

Yorkshire Dales National Park Warden Service.

W. V. Patrick (Builders) Limited, Grassington, (Machines).

G. B. Houghton, Contractors, Bentham, (Digger).

Taylor Woodrow, Hellifield, (Tractor).

West Riding Emergency Feeding Scheme, Wakefield.

Civil Defence Office, Skipton.

Royal Engineers, Ripon.

Caving personnel from various clubs.

Dr. H. Lord, Derbyshire C.R.O. (Communications).

The peoples of Conistone, Kilnsey, Kettlewell and Grassington.

Underground Leader: Desmond Birch assisted by Alan Fincham and Brian Boardman.

Surface Leaders: Len Huff and Reg Hainsworth assisted by Chris Baker and Harry Long.

Police: Chief Inspector Scott, Inspector Poskitt and Sergeant Gains.

Notes about this version of the report:

The original report was typed on Foolscap size paper and was difficult to scan correctly.

This report created with OCR software has remained faithful to the original. Some first names left out of the original have been added for completeness.

Mick Melvin 2016

Letter from caving bodies to Stephen Brown Craven District Coroner

CLOSURE OF MOSSDALE CAVERNS

The following statement has the unqualified support of the individuals whose names are appended and whose support was enlisted as a result of a general meeting of cave rescue personnel held at Grassington on Sunday, 2nd July. The opinions expressed appear to be unanimously accepted by all other cave rescue personnel and speleologists throughout the United Kingdom.

This information has not been publicly released in any manner whatsoever and is brought to your attention as one of the relevant authorities in this matter.

Mossdale Caverns consist of a complex network of over five miles of largely horizontal passages, with the prospect of more extensive, unknown passages, extending over an area of several square miles.

Mossdale Scar itself is an unstable feature and is subject to considerable frost action, boulder fall and stream erosion, which leads to frequent changes of the structure of the scar face and the underlying cave passages. This weathering action makes the likelihood of the appearance of further restricted entrances to the cave system very great and such entrances may present routes into the caverns behind, which will be of greater difficulty and danger than the present known entrances. Such openings are particularly likely at the southern extremity of the Scar with connections into the Thin Stream section of The Western Passages, and also in the vicinity of the present New Entrance.

The closure of the present entrances to the caverns, by means of boulder blasting, or by concrete, will simply seal off the only reasonably negotiable entrances should access to the system be required at a later date for rescue. Any attempt to blast the full length of the scar is very likely to lead to the opening of several further routes into the caverns.

Mossdale Scar is a remote site and attempts to prohibit access are certain to be very difficult. It is therefore probable, in view of the structural considerations referred to above, that entry into this system by unauthorised parties will be gained in due course, even though the main entrance has been "sealed". ' In this event, any accident is likely to lead to a rescue operation of a more difficult nature than the recent disaster, and a greater risk to life for both the victims and the rescuers.

In view of these considerations, it is suggested that the present main entrance to the cave should be re-excavated, gated, and access closely controlled.

It is the opinion of the following persons that unless a course of action close to that suggested above is taken, there is a very- real probability of accidents and/or a future loss of lives in this cave system, with the attendant repetition of the effort and expense. It has to be realised that it is not possible to prevent eventual access to this system by cavers.

- | | |
|---------------------|--|
| Dr. J.O. Myers. | Lecturer in Mine Surveying and Applied Geophysics
The University of Leeds. Past Chairman of The
Cave Rescue Organisation, and expert on the
hydrology of Mossdale Caverns. |
| Dr. G.T. Warwick. | Lecturer in Geomorphology, The University of
Birmingham. Expert in karst geomorphology and
cavern formation. Past Chairman of The Cave
Research Group of Great Britain and adviser on
caves to The Nature Conservancy. |
| Mr. L. Huff | Chairman of The Upper Wharfedale Fell Rescue
Association. |
| Mr. M. Hollingworth | Adviser on Cave Rescue to The Cave
Research Group of Great Britain, past
Chairman of The Cave Rescue Organisation and
Council member of the British Speleological
Association. |
| Dr. A.G. Fincham. | President Leeds University Speleological
Association. Chairman of Leeds Area Team
of The Cave Rescue Organisation and surveyor
of Mossdale Caverns. |
| Dr. K. Pearce | Chairman, The British Speleological Association
Adviser on Cave Diving to the
Cave Research Group of Great Britain. |

In addition, both the Cave Research Group of Great Britain and the British Speleological Association support the analysis given above.

Copies to:

The Home Office.

The Secretary of State for Home Affairs.
H.M. Coroner, Skipton, Yorks.
The Chief Constable, West Riding County Constabulary,
Wakefield.
The Divisional Superintendent, Skipton, Yorks.

6th July 1967

STEPHEN E. BROWN, LL.M.
H.M. CORONER FOR CRAVEN DISTRICT
OF YORKSHIRE

Telephone :
Residence : Cracoe 238
P. H. C. Walker
~~R. G. GIBSON SHARP KLB.~~
H.M. DEPUTY CORONER
Telephone :
Residence : Skipton 2951



In reply
please quote
J/D/12000/10.

CORONER'S OFFICE
BANK BUILDINGS
SKIPTON
Telephone : SKIPTON 3333

13th July, 1967.

Dr. A.G. Fincham,
President Leeds University Speleological Assn,
c/o The University,
LEEDS.

Dear Dr. Fincham,

I received the Memorandum headed "Closure of Mossdale Caverns" dated the 6th instant, of which you are one of the signatories, and I have the following comments-to make thereon:

1 I think the final sentence in para. I of the memorandum represents your opinion or wishes, and can hardly be accepted as a statement of fact, After all, it would be utterly impossible, between the 2nd July and 6th July, to ascertain that your opinions have been unanimously accepted by all other Cave Rescue personal and Speleologists throughout the United Kingdom.

2 As I understand it, the primary object of sealing up the entrance was to ensure that the bodies' entombed in the cavern remain undisturbed, and also to discourage, so far as practicable, other persons in the future from obtaining access to what Has-been proved to be a dangerous cave. Any attempt to "unseal" the cave is likely to defeat both of these objects, and if the entrance were to be re-opened and gated, this would, I think, inevitably encourage people to obtain access to the cave. In any event, having regard to the fact that the ground in the vicinity of Mossdale is liable to move, any attempt to seal it with a gate may only be effective temporarily.

3 It is appreciated that other entrances to the cave system may become opened, but I sincerely hope with the approval of the owners of the property, all known entrances will, from time To time, be closed in such a way as to prevent access

It is hoped that the closure of known entrances to the cave system will effectively discourage pot-holders and others from attempting to gain access to what, after all, is the grave of the 6 young men who died on the 24th June last.

Finally, I note your suggestion that the entrances should be re-excavated, gated and the access closely controlled. This, however, would involve expense for which no funds, of which I am aware, are available, and I know of no person or authority who could properly be asked to accept responsibility for exercising such control.

Signed: Stephen Brown

ALAN FINCHAM'S REPLY TO CORONER STEPHEN BROWNOctober 17th 1967

As a person who had a long association with Mossdale, was a close friend of some of those who died on June 24th, and who was directly involved in the rescue attempt I am now deeply concerned that the understandable emotion and horror which has been generated by this disaster should not be allowed to cloud the vital practical safety issues which have emerged.

I understand that as the result of an appeal by the C.R.O and U.W.F.R.A a substantial sum of money has been contributed towards the purchase of new equipment. However, it appears likely that despite this well meant support from cavers and the public alike, Mossdale Caverns will remain a serious hazard on account of the flooding potential, and none of the new-found resources of the rescue organizations will have any value to a future party trapped by flood waters.

This is also true of more sophisticated communication equipment, such as the induction apparatus which proved so useful during the attempted rescue; and I am brought to the regrettable conclusion that unless some suitable action is taken the cave will continue to present a serious danger which the loss of personal with knowledge of the system, the remoteness of the site and the notoriety achieved will serve to enhance in time.

It will be argued by many that the exploration of Mossdale by cavers will never be continued and therefore it is not necessary to consider the matter further. I for one am not able to accept this rather complacent approach and believe that, in due course, the cave will again be visited by cavers. When this occurs the risk of a repeat disaster will again be present unless action is taken now to prevent this.

I would suggest that the rescue organisations have three courses of action open to them;

1. To ignore the situation which I have endeavoured to present to you and take no action.
2. To publicly state that in the event of a party being trapped by flood waters in Mossdale Caverns there is no action which can be taken to prevent another death by drowning.
3. To prevent such a repeat disaster by supporting a programme of works to make the system safely accessible to cavers.

I for one would not like to be judged by posterity for acceptance of the first alternative.

If the second course is accepted then I suggest that notices to this effect should be posted at the scar and in the press and action then to make all cavers aware of this situation. It is my view that this would be a sad reflection of the spirit of the caving world.

It is my suggestion that the third course of action is in fact the only realistic one which is open to those of us who are concerned to see that this disaster will never be repeated.

Prohibition has never, and will never work. Access to the cave cannot readily be prevented, despite attempts at blocking entrances. Weather and water will take their toll and in time alternative routes into the system will appear.

Attempts at prohibition are unlikely to be successful, certainly not as a long term proposition and in any case this approach is dangerous in that it promotes the clandestine visit with no possibility of control.

Since the cave entrance lies on common land and the path from Conistone to Nidderdale is a right of way control of access is likely to be difficult. Therefore it is my belief that parties of cavers will in time continue the explorations which six men died for and that it will prove extremely difficult to control or prevent this. In the present situation this is likely to lead to a further disaster which the rescue organisations will be completely helpless to prevent.

The attempted rescue operation demonstrated the success of the use of a dam and diversion channel for diverting Mossdale Beck and it is a hard fact that had such a dam and diversion existed on the afternoon of June 24th. six of our friends would be alive today.

I would therefore suggest that the rescue organisations should actively sponsor a programme of works to obtain such a dam and diversion channel as a permanent feature thereby making the cave system safe from flooding and opening the system to detailed exploration and study. To those people who are anxious to provide a memorial to the six who died I would suggest that this would indeed be in keeping with spirit of the situation.

It will doubtless be found very easy to raise many objections to this proposal, but I would ask any who may do so to consider very seriously what the alternatives may be.

Yours sincerely,

Alan Fincham.

Copy to;

C.R.O

U.W.F.R.A

ACKNOWLEDGEMENTS

I would like to thank the following individuals and Clubs who have allowed me to use their material.

Daryl Magee and Peter Barry of The Speleological Union of Ireland, James Begley and the committee of Shepton Mallet Caving Club, Andy Chapman, Frank Rayner, Tony Waltham, Ron Bliss, Dave Brook, Dave Drew, Jim Newton, Jim Cunningham, Jed Scott, Bob Gillibrand, Harry Long, Pauline Rayner, John Comer, Alan Fincham, Alan Brook, Ray Kershaw, John Cordingley, David C. Brook Bradford Pothole Club, Natural England, The Leahey Family, Daryl and John Donovan, The Red Rose Cave and Pothole Club, The committee of The Wessex Cave Club, Members of the Happy Wanderers Cave and Pothole Club for their contributions, The trustees of Upper Wharfedale Fell Rescue Association,

BIBLIOGRAPHY

Wessex Cave Club Journal No. 116, Volume 10. (April 1968)

Ray Kershaw: 'In Living Memory Mossdale Caves' BBC4 (19th March 2008)

Anytime...Anywhere, UWFRA, Dalesman: p. 47-50 (1998)

Down to a Sunless Sea: J.M. Boon, The Stalactite Press, Edmonton, (1977)

Brook, Dave (July 1971). "Mossdale Caverns 1971". University of Leeds Speleological Association Review (8): 24, 25.

University of Hertfordshire, '*Moorland Grip Blocking*' (2011)

M.A. Melvin '*Moorland Gripping and Cave Flooding*'
Cave Research Group of Gt. Britain (CRG): Newsletter 98 (1965)

'*Weather and its Effect on Caves*' a Guide for Cavers
British Caving association December (2011)

http://www.sssi.naturalengland.org.uk/citation/citation_photo/2000376.pdf

Brook, Dave (July 1971). "*Some Aspects of Moorland Gripping*". University of Leeds Speleological Association Review (8): 6, 7.