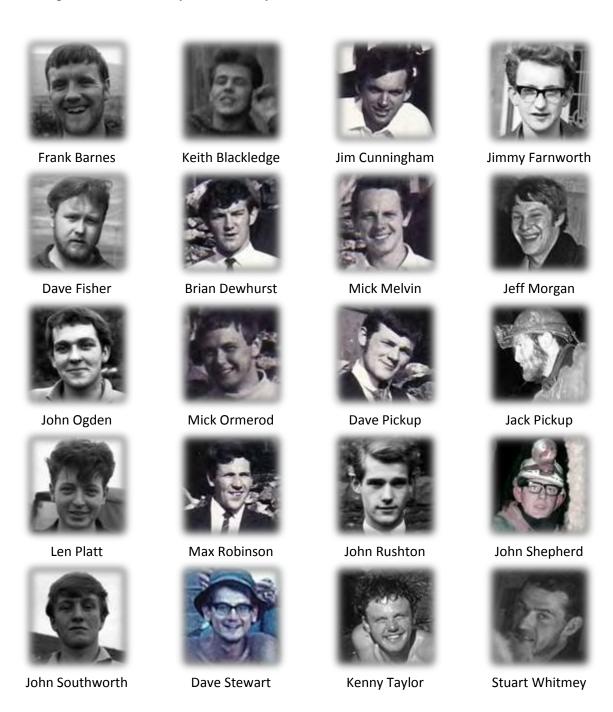
During the 1960s the Happy Wanderers Cave and Pothole Club was a small limited membership caving club based in Kingsdale near Ingleton.

The Happy Wanderers were at the forefront of much of the new cave exploration work carried out in Yorkshire and Lancashire during the 60s and 70s. Often their members would work together with other cavers, or caving clubs in a joint venture to push new ground. The club produced its first journal in 1966 which has long been out of print. Many people have enquired as to where a copy can be obtained. With that in mind I have digitised the original Journal and made it available on the Internet. I have included a new preface with photos of members who were active during the years 1964/68.

There are at least three members whom I don't have images for; I include their names here for completeness: Dave Taylor, Mike Myers, and Len Law.



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INTRODUCTION

Jack Pickup

Finally the Happy Wanderers have become conscious of the fact that their activities and wanderings should be recorded in a journal.

It is here that a short history of the club should be recorded, so as not to confuse readers who have been lead to believe that the H.W.C.P.C. was founded in 1741 by a certain long standing member.

The H.W.C.P.C. was founded in 1957 by a group of Potholers from the Blackpool area. Initially it had a reputation of being a fireside group, but after a number of cavers joined from the disbanded Bury P.C. the name Happy Wanderers struck a chord (?) starting on an upward climb of recognition. The beginning of the 60s saw the Wanderers installed in their hostel attached handily to the Marton Arms, Ingleton. A period of intense caving with our good friends the N.S.G. followed for a period of approximately two years broken only by the tragic death of Mr. M. McShea. After this for a period of six to nine months the club hovered between life and death, with four or five members fighting to keep it alive, until several of our friends from the N.S.G sought membership greatly increasing the club strength. Following this Mr. L. Waite gave us six months to vacate the Marton Arms. We approached Mr. J. Batty of Braida Garth Farm Kingsdale who promised new quarters within a month.

January 10th 1965 saw the erection of our present hostel at Braida Garth. Since then the club has experienced intense activity in many fields of speleology.

At the time of writing club membership is closed at sixteen, Small you say, yes, but manageable with no social committee or such organisation and club politics are (almost!) nonexistent.

I feel sure the Happy Wanderers contribution to speleology from the few articles enclosed in this, our first journal will be of interest to most, if not all speleologists.

We would like to take this opportunity of thanking Mr. J.Batty for providing us with our present hostel and treating us so well over the past twenty months. We appreciate it greatly.

At the start of this journal we are reprinting a description of "our" valley - Kingsdale - which was originally published in 1781 in a book written by the Rev. John Hutton, entitled "A Tour to the Caves," The spellings are as printed in the book.

"After we had got about six miles from Kirby-Lonsdale, to a Public-house called Thornton-church-stile, we stopped to procure a guide, candles, lanthorn, tinder-box etc. for the purpose of seeing Yordas cave, in the vale of Kingsdale, about four miles off: By the advice of a friend, we took also with us a basket of provisions which we found afterwards were of real service. When we had gone a little above a mile, we were entertained with a fine cascade, called Thorntonforce, near some slate quarries, made by this river out of Kingsdale, falling down a precipice about eight or ten yards high, which afterwards runs through a deep grotesque glen to Ingleton. About a mile higher we came to the head of the river, which issues from one fountain called Kelsehead, to all appearance, more fluent than St. Winifred's-well, in Flintshire: though there is a broken, serpentine, irregular channel, extending to the top of the vale, down which a large stream is poured down from the mountains in rainy weather. We now found ourselves in the midst of a small valley about two or three miles long, and somewhat more than half a mile broad- the most extraordinary of any I had yet seen. It was surrounded on all sides by high mountains, some of them the loftiest of any in England, - Whernside to the South-East and Gragareth to the North. There was no descent from this vale, except the deep chasm where we saw the cascade, we were quite secluded from the world, not an habitation for men in view, but a lonely shepherd's house, with a little wood, and a few enclosures near it, called Breada-Garth. It is on the north side of a high mountain, seldom visited by man, and never by the sun for nearly half a year. No monk or anchoret could desire a more retired situation for his cell, or disappointed lover to moralize on the inconstancy of his nymph, and the vanity of the world. The soil seemed the deepest and richest in some parts of this vale of any I had ever observed, and no doubt is capable of great improvement. I could not but lament that instead of peopling the wilds and deserts of North America, we had not peopled the fertile wafts of the North of England. I have since indeed been informed that a plan is in agitation for having it enclosed, when I make no doubt but it will support some scores of additional families."

Although the author was in the first party when this cave was extended, the idea for the dig was one of the N.S.G. and the extension is classed as an N.S.G. find.

Aygill Hole is a small cave whose entrance lies below a rockface in a picturesque gill which takes a large amount of water off Barbon Fell. Several members of the H.W. and I had all taken note of the large amount of water which sinks in this cave in flood conditions and for several years had intended entering the cave and having a "dig" We had however, as with other prospective "digs" not found time and it was not until the weekend of October 9th 1965 that we entered the cave.

On this week-end Len Platt and I were invited to help the N.S.G. who told us that they were spending the week-end digging in the cave and giving it a hard "push" Unfortunately I found myself with a choice of taking part in an S.S.P. trip on both the Saturday and the Sunday or going digging. Never being a lover of pick and shovel I chose the former, but as I have previously promised to give a hand, I decided to have the Monday off work.

At 10 a.m. on a beautiful, clear, warm day found Pete Rothwell, Beer-Matts Martin, Kenny Taylor, a "loner" of the Dales, and I changing into our caving gear at the cave entrance. Coming over from Ingleton in Pete's Mini Cooper, he and Matts had explained that the previous two days they had been digging at the termination of the obvious downstream passage. Although digging had been industrious no real progress had been made. There was, however, one more place which Pete had spotted whilst exploring the cave and which he considered a worthwhile dig.

The entrance to the cave is a small shaft of eight feet followed by a squeeze into a narrow stream passage. Instead of following the passage Pete pointed out an aven. We climbed this and found that a low tight crawl led off. Pete explained that he had gone along the crawl for about six feet, where he reached a cross-rift. Owing to the tightness of the crawl and the rift he had been unable to negotiate the right-hand bend. Pushing his head and shoulders into the rift he saw that it was blocked except for a small hole a few feet along the rift.

As I was the smallest in the party it was decided that I should try to get round the bend into the rift and see what was below the hole. I slid along the crawl and after moving several boulders, which I had to pass back to Kenny, who was following, I managed to negotiate the bend, I found myself in a tight rift which closed up just further than the hole that Pete had pointed out. I looked down the hole and thought I could see a small chamber, but was not sure as my view was restricted by a large flat boulder which was causing the blockage in the rift. After getting stuck in several uncomfortable positions and finally nearly squashing vital organs I decided that the hole could not be passed.

There then remained two alternatives. One was to remove the large boulder, but after trying for several minutes, I realised that it would be impossible for one man and soon dispelled this idea from my mind. The remaining possibility was to dig at the near side of the boulder. Removing several boulders I found that digging would not be easy. As I was in such a confined space it was difficult to bend down or turn round, and when I managed to pick up a boulder there was nowhere to put it except between me and the crawl leading out. Half an hour later I was about two feet lower in the rift but I had also blocked myself in. This was not too discomforting as I could always pull the boulders back. The barrier also served a good purpose: it obscured the view of Kenny's grinning face, who had been finding great pleasure in watching my discomforts.

By this time I was becoming a little discouraged by the progress but after removing a fairly large boulder a hole appeared in the chaos of boulders. After I shone my light down the hole and could see to a depth of about six feet, my enthusiasm for digging soon returned. I decided that it would be quicker and easier to drop the rocks down this hole, and after doing this for about ten minutes I had made a hole just large enough to squeeze through. Taking great care not to disturb any more boulders from the choke I dropped through the hole and found myself in what I first thought was a small chamber measuring approximately four feet wide, six feet long and about seven feet high. However, looking round I realised that I was in the same rift but at a lower level, the roof of the chamber being the large boulder which had caused the original obstruction. The rift seemed to close up again except for a small hole in the far corner.

By this time Kenny was impatient to join me, so I told him to drop the boulders that were between us to the bottom of the rift where I was standing. In a couple of minutes Kenny was crouched beside me surveying the prospects. The hole in the far corner was the obvious place and Kenny was soon scraping away at the loose stones and gravel. The hole soon began to enlarge. The larger the hole became, the faster and more frantically Kenny dug. We shone our lights through the hole and could see a small passage. After several efforts of squeezing through the hole and then several more scrapings to remove the extra few inches Kenny disappeared along the crawl.

Seconds later I heard e voice cry, "I've broken into a passage and it G-O-E-S." With a shout of "wait for me you -*!?* I pushed myself through the hole and found myself chasing a speedily disappearing carbide lamp along a narrow rift passage I had gone about twenty feet when a loud cry pierced my ears. "It's a P-P-P-Pitch." Excitement getting the better of me I dashed forward only to be enveloped in blackness as my carbide lamp hit the wall and was extinguished. Kenny's light reappeared along the passage and one of the most excited faces I have seen. We decided to return to the others and give them the good news.

When we reached the crawl Matts and Pete had been doing a bit of "gardening" and the crawl was now quite roomy. It was between fits of uncontrollable laughter and grins we managed to report our findings. It was decided that we should return to the surface and then Ingleton where we could buy some refreshment and replenish our now low supply of lighting. Two hours and several beans on toast later we were once more descending the entrance shaft this time we had two twenty five foot electron ladders. Kenny and I hurried to the head of the pitch. The pitch itself was in the corner or a fairly large chamber which was decorated by several bonny formations. We laddered the pitch while waiting for Pete and Matts, as being of larger build; they took a little longer to negotiate the tight section. They soon arrived however and we descended the pitch which was about twenty five feet deep. We had climbed into a large but now water deserted stream passage. This was blocked immediately on one side but on the other it carried on upstream for several hundred feet gradually lessening in size as it neared the surface.

The way downstream seemed to be down a crack in the passage floor. With the remaining ladder in my hand I dropped through the crack into a low crawl. I called to the others to follow and we proceeded along the crawl. Unfortunately at this point my carbide lamp began to flicker due to shortage of water. As we had not yet met any water I was unable to refill it.

Rounding a corner we all heard the low rumble which we recognised as a flowing stream. As we progressed we could stand up in the narrow passage and by then the rumble had grown into a roar. Coming to a tight corner, where the floor dropped away, I stuck my hand round. At the same instant my light went out but I was sure it was a pitch. Kenny belayed the ladder and I lowered it down the pitch. Due to the awkwardness of the passage it was decided that I should descend the pitch for a few feet where it would be easier for Kenny to pass me a good light. I carefully squeezed round the corner and began gingerly to descend the pitch, the roar of the water ringing in my

ears, much to my surprise and disappointment and to the amusement of the others I found the pitch was the great depth of four feet. however, after swapping lights we saw that the ladder need not be recoiled as a further ten feet along the passage there was a pitch. We re-belayed the ladder and lowered it down, but realised immediately that it would not reach the bottom.

The pitch itself entered a large chamber which we found later to be as high as eighty feet in places and about twenty feet wide. we took it in turns to climb for about twenty feet down the ladder to a small ledge from where it was possible to survey the chamber. The water, after coming from a large inlet passage on the left flowed along the floor of the chamber before disappearing round a bend in the well water-worn passage. It is hard to imagine our thoughts and feelings as we saw the stream rushing away down unexplored passages while we were stuck twenty feet above it.

Suddenly somebody remembered the ladder on the first pitch. If it was possible to free-climb this, we could use the ladder to bottom the big pitch. I hurried back to the first pitch and discovered that the opposite side of the chamber was an easy climb. From this side I could step over to the head of the pitch. I hastily recoiled the ladder and returned to the others. We linked the ladders together and Matts descended the pitch to disappear immediately along the upstream passage. By the time we had all reached the foot of the pitch Matts had returned chuckling "fantastic: loads of water passages twenty feet high great."

We then set off to follow the downstream passage. Almost at once the water fell down a series of four sporty cascades each about eight feet deep. These were followed by a low, wet crawl which after several feet split up into a roomy dry passage and the continuation of the downstream crawl. We took the dry passage which shortly led to a large, sandy chamber where we sat down to Survey the situation and discuss our next move. From where we sat we could see several passages just waiting to be explored, but for once we did not let excitement get the better of what little common sense we had. We had been down for several hours, lights were getting dim, so we reluctantly decided to make our way back to the surface, returning the following week-end. By doing this we would also give the lads who had worked on the previous days a chance to experience the thrill of treading unexplored ground. The break-through had been made.

The cave has now been extended for several thousands of feet, containing many interesting and complicated passages. The terminal sump is one of the largest in England and also there are many opportunities for further extension. A survey of the cave has been prepared by members of the N.S.G.

Skirwith Cave is on the slopes of Ingleborough about a mile from Ingleton on the Hawes road. It is a resurgence cave and the first four hundred feet is a show cave which the farmer of the nearby Skirwith Farm owns.

The first trip this cave by members of the Club was in July, 1965 by Jack Pickup and John Southworth. They reached the final sump and decided to have a go at free diving it. This was done and it resulted in a ten foot dive to a cross rift. Then another free dive was accomplished, the length of which was fifteen feet, which brought them into a chamber about fifteen feet wide, fifteen feet high and forty foot long, but this also ended in another sump which they did not try to dive having been satisfied they had enough for one day.

Most of the Club were on the next trip into the cave and the first sump was lowered to make this into a semi-duck, this also lowering the second sump, but not enough to make it diveable. Many more trips into the cave were made, with the hope of lowering the sump, and it was tried as a free dive, but nobody got more than fifteen feet or so into it.

By this time some members of the Club had taken up cave-diving and had joined the Cave Diving Group. It was on April, 17th, 1966 that the Club with five of its divers (these being, Jack Pickup, John Southworth, Mick Melvin, John Ogden and Mick Ormerod set about another push on the sump. It must be said now that Skirwith Cave is not a very easy cave, especially when diving gear has to be carried, because most of its three thousand foot length is flat out crawling up to your neck in water. The divers reached the base for the dive and kitted up.

Having checked all the equipment, John Southworth went into the sump (with Jack Pickup as standby diver.) There was a 175 foot courlene line attached to him to be used as a guide line. All was going well with good visibility and the passage height was about three feet but the width could not be judged owing to the poor lighting under water. This dive continued for twenty-five foot to an airspace twenty-five feet long where one can stand up comfortably, to another sump, which he then dived through, being the same shape and length, roughly, as first sump, to a large chamber where he belayed the end of the line. The total passage so far found was seventy-five foot, two twenty-five foot sections of these being submerged.

When the diver had returned to base it was decided that they

should all go through and take with them the hundred feet of courlene still left.

Eventually every diver was through the two sumps (which we called 1 and 2 respectively) and they began exploring the chamber which was quite large compared with the rest of the passages in the cave, but alas, after only forty feet of big chamber they came to another upstream sump. This was much larger than the others, being twenty feet long and ten feet wide. John Southworth and Mick Melvin donned their diving gear again and John dived again with Mick as standby diver. The way on was found to be on the left hand side of the sump and after a dive down of about five feet under a flake, which rose a few feet at the other side, he entered a fifteen feet wide and about ten feet high passage with a gravel floor.

The visibility was good and rapid progress was made until the diver ran out of line after a hundred foot dive, but by very good luck the place where the line ran out was just below an air space, so he belayed the line to a boulder on the floor of the passage and then surfaced to the air space. A close inspection showed this to be about twenty feet long, five feet wide and two to three feet high. Obviously nothing else could be done without a guide line so John returned to base and the party retired to the somewhat warmer climate of the open air, hoping to come back another week-end with more line.

It was not until may 29th that the divers returned again, all these people being members of the Cave-Diving Group: they were Mick Ormerod, John Southworth, Jack Pickup, Mick Melvin of the H.W.C.P.C., Bill Frakes of the B.P.C. and Ken Pearce of the B.S,A. Every diver had his own kit which includes a fifteen pound weight belt, diving bottle, demand valve, mask, flippers and so on and it would have been impossible for every diver to carry his own gear, so the Preston Caving Club was asked to do the job for us and they accepted, which we were very grateful for because without them the dive would have been impossible.

The trip to the sump was without incident and the divers kitted up and all passed sumps one and two without much bother. At sump three, Bill Frakes, John Southworth and Ken Pearce kitted up for the dive with Ken Pearce as standby diver whilst John and Bill went through to the air space for the push on sump four. Once they had arrived at the air space, the end of a two hundred foot coil of courlene was fastened to a belay and Bill stopped in the air space while John carried on into the sump for approximately thirty feet in a rift type passage until he came to a blank wall. On closer inspection of the passage the way was seen to be down to the left

on a bedding plane which was about three foot high, fifteen foot wide which he followed for approximately fifty feet to a boulder choke

John then decided to return to the air space because digging would have been impossible owing to the limitations of his air supply. Once there John and Bill returned to base and the party than set off back through sumps two and one and then back to the entrance.

We hope to do many more dives in Skirwith and also dig the final boulder choke. Incidentally, the boulders of this blockage were covered in calcite, which proves it must have been flooded comparatively recently.

The total length of new passage is 380 feet making the length of the cave 3280 feet long so far. None of the sumps in the cave can be free dived apart from the original duck and it would be foolhardy and dangerous to try them.

THE TRUTH ABOUT THE COLLONADES

Dave Pickup

In January 1965 it was reported to the Council of Northern Caving Clubs that the tallest of the Collonades in Lancaster Hole, had been smashed by vandals. People have asked. "But how does one smash a six inch diameter piece of calcite?" The answer is, they tried to climb up it. The sides of the collonade were scored by tricouni's.

The Club decided, reluctantly, as they do any act of labour, to repair this fallen pillar. A meeting was called to suggest ideas for repairing the column. Amidst such witticisms as jam, or scrape out the inside of Oggies sleeping bag, we decided on recruiting the help of CIBA Ltd., who manufacture the Araldite range of Epoxy resins CIBA were approached and recommended Araldite GY252 resin and X85/144 hardener and a filler of marble flour, this combination being devised specially for low temperature work. We were very pleased to receive free samples from CIBA Ltd..

We arrived at Bull Pot Farm early one February morning to find Derek Brandon of the Royal College of advanced Technology waiting there for us, anxious to get started. The entrance pitch was soon laddered and all the tackle transported to Collonade Chamber. A couple of the lads commenced matching the five broken pieces, laying them on polythene sheets and cleaning them. Everybody else generally supervised that. It was obvious that when the top sections of the column were to be placed in position, some form of hoist would be needed. Anybody who has trekked through the hole must have seen there the untypical cave decorations, in the form of iron ladders. One of these uprooted and leant against the wall made a perfect gantry.

The resin and hardener had been pre-packed and weighed in polythene sachets. The reason is simple. It's bad enough to try to weigh accurately, Araldite and pour it into sachets in the middle of our hostel with the rest of the Club around. In a cave with mud and water for everyone to play in, it would be impossible!

The mixture was spread onto the corresponding pieces, which were manoeuvred into position. After amusing ourselves for half an hour or so, to give the Araldite time to bond, the next piece was placed in position. By now the column was some eight feet high, so safety precaution splints were fixed on the joints. Not so much because the column was top heavy, much to the contrary, we found it in perfect equilibrium, but to safeguard against any accidents occurring After some nine hours of hard work, stopping only to devour a

rather doubtful looking stew which had been carried all the way in lovingly, by Derek Brandon of RCAT-CPC and brewed on a stove in the inlet passage. The column was complete except for the three inch long straw which was reputed to join the column on the ceiling. Because none of our Club is experienced in the handling of delicate straws, it was decided unanimously to insert Kenny Taylor in the space. However he didn't want to go, so we had to make do with a piece of fallen stalagmite about one inch in diameter which was chipped to length. I climbed the ladder, posing for photographs every foot, and placed it expertly in position. On my return to the ground, this piece of calcite heeled over and struck one of the lads below. But we were not to be put off by this, it was placed in position again and to my knowledge is there to this day.

I at first had nightmares of a big exposure in the Speleologist about the hoax we were trying to pull on the caving world, but after the first six months my worst fears appeared to be groundless. It seems the entire caving world was up in arms about the theft of some drainpipe in Swildons.

To you lads down South a moral can be learned from this story. If the Swildons pipe had been fixed with Araldite, there would have been no theft and hence no space was needed in a good magazine!

But seriously, great satisfaction was gained from repairing the Collonade — it was over a year ago when I returned to Lancaster Hole to inspect our work and I must admit I felt very proud to have helped to rebuild it. With the co-operation and technology of industry coupled with hard work on the lads part we have renovated surely Britain's most spectacular cave formation, and we are proud of it.

Incidentally, another interesting point is that CIBA Ltd, asked us to photograph the repair. This was done by Jim Cunningham and the photographs' were used by CIBA for advertisement purposes. In payment for these they sent £5 to the Cave Rescue Organisation, as well as paying Jim's expenses, so the repair also helped the C.R.O.

EXTENSION TO DALE BARN CAVE J.Cunningham

For over a year the H.W.C.P.C. have been interested in Scales Moor, and much work has been done there recently, so it was natural that Dale Barn, a flood resurgence for Scales Moor, should be investigated. Dale Barn entrance is in a rocky shakehole near Beezely Farm. It can be found by following the back road from Ingleton to Chapel-le-Dale and taking the track on the left about three quarters of a mile past Beezely Farm, which leads to a modern wooden bungalow. Walk about a hundred yards along the track to a dry valley and the cave is about thirty yards away next to the fence at the top of the field.

A tight entrance leads into the crawl. This is about 700 feet long and for most of the way is flat out on a clayey mud floor. The passage is wide, and occasionally canals are reached. These are about a foot deep, and as the roof is very low, are quite damp! As the end of the crawl is approached, a stream can be heard. This sinks in the final canal. A large passage in reached here, with beautiful calcite flowstone. The stream can be followed up for about eighty feet through quite large passage, until it emerges from a tight crack. This was the cave as found by the N.S.G. in 1956. A high level bypass of the crack has recently been blasted by K. Pearce (7th May, 1966) and the stream has been reached beyond this constriction. At the furthest point upstream the stream now emerges from a three inch wide crack, about twenty feet upstream from the original blockage. It opens out at the top though, and may be passable after several large boulders have been removed.

On 16th April, 1966, two H.W.C.P.C. members, D. Stewart and J. Shepherd explored the cave and noticed a sump with a small air space, on the right, just after the final canal. This was dived and found to be followed by two more "ducks." Incidentally the water has since been lowered in these and they are new merely a wet crawl. After these a hole in the roof followed by a short crawl led them to a series of large chambers. However, they were short of light, so after a quick look round they left the cave.

Next day a much stronger party entered. The chambers found are large and beautifully decorated. The walls are almost black and contrast greatly with the pure white and orange formations. They" are obviously phreatic in origin, as shown by their network plan, including a loop, and their largo size and sudden constrictions. At one point a tight stomach crawl about two feet long joins two large chambers. The walls of the lower chambers especially are composed almost entirely of semi-spherical hollows in the black rock. The floor levels also suggest phreatic origin, all the various chambers behind at random levels, with no attempt at grading.

There appears to have been a fill at one time about ten feet above the present floor level, as evidenced by a thin layer of pale clayey mud clinging to the walls up to this height. Its junction with the underlying black limestone is very prominent, and is not horizontal, so could not have been caused by flooding. There are several stalactite formations below this level, including straws, most of them coated in a thin layer of mud, though several small ones are perfectly clean, suggesting they were formed after the removal of the fill. On the floor of several chambers are neck-high banks of pebbly fill, with a passage cut through them as if by a vadose stream.

These features appear to substantiate the conclusions of Kaye ("The Effect of Solvent Motion on Limestone" Jour. Geol. V 65, pp 35 - 46, 1957) He concluded that the phreatic enlargement of passages would ultimately result in developing passages so large that the supply of water could not fill them. "An air space would then form in the higher passages and conditions would be right for calcite deposit. At this time, when the cave is in transition from solution below the watertable to aeration above it, a fill tends to develop. This fill reduces the size of passage and permits temporary return to phreatic conditions. The fill would then grow until the stalactites were covered in the clayey fill, gently deposited under water. When the water-table level dropped, the ponded water would drain off, taking with it a large amount of fill, so leaving the cave as we find it today;

There are several interesting formations, including a mud stalagmite about fifteen inches high, with the start of a calcite stalagmite on top, directly above this is a three foot erratic stalactite. Cave pearl pools are in abundance, with several pastel blue pearls, though none of perfect shape were seen. There is also a straw stalactite, which must have broken off many years ago and fallen so that one end rested on a short stalagmite. It is now firmly welded into the position it fell.

At the end of the chambers a fairly constricted passage leads off. This was followed with great excitement for about a hundred feet, when it led into another chamber. However, this was recognised as the one we had just left, we were disappointed to find that we had come round in a circle!

The most hopeful way on seemed to be back near the first sumps. A boulder slope led down into a chamber. A short duck led into another very pretty solution chamber, the way on again being through a static sump. In both these two "ducks"there is about an inch of air space, but it is very difficult to use, and both are easy dives. After the second duck a fairly large chamber is reached, again very prettily decorated. A mud slope leads down from this into the final sump. This can be free dived for about six feet to a small air space but

after that free diving is impossible, we returned to the surface.

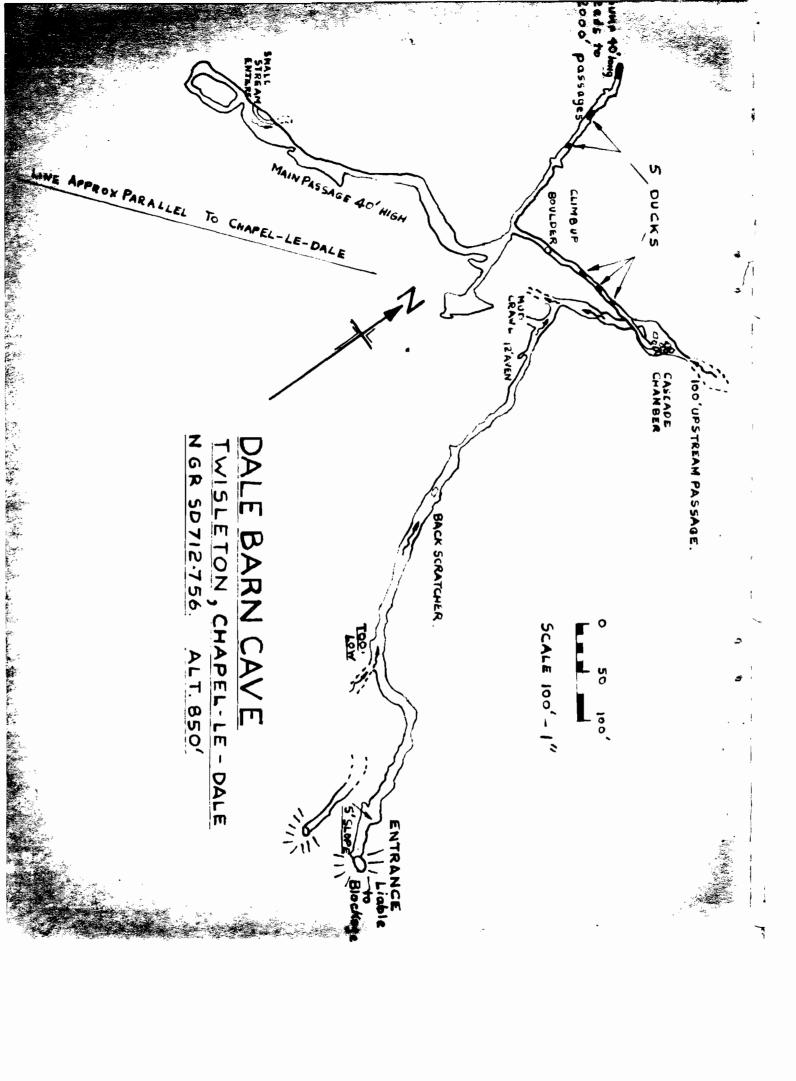
Next week-end three shifts went down. On Friday night a surveying party entered and completed a C.R.G. Grade 5 survey of the new passage, the total length being about eight hundred feet. At 6 a.m. Saturday morning D. Stewart and K. Blackledge took diving equipment in to see if the final sump was short enough to free dive. They found it tight and long and very difficult without a weight belt, so returned. At 11 a.m. a photographic team went in and photographed the new section.

It was a fortnight later (6th May, 1966) that a big attempt was made on the final sump. At midnight on Friday 6th May, eleven Happy Wanderers including four Cave Diving Group members, gathered outside Dale Barn with diving equipment. The crawl was negotiated and a diving base set up in the large chamber just before the last free dive.

Dave Stewart was the first to dive. He made slow progress and at one point stopped for about half a minute. We later learned that he had to dig his way through! After about sixty feet, he signalled that he had got through, belayed the line, and shortly afterwards came back. It went, he said, but the sump was very tight and dangerous. There were pendants hanging from the roof and large boulders on the floor, all likely to knock off a mask, demand valve, or air-clamp. He had in fact lost his demand valve from his mouth at one point. The sump was forty feet long to an air space and then a further fifteen feet to the end. He then went back through, followed by John Ogden, to explore the passage at the other side. Both wore flippers leaving their boots with us. They got through safely and then there was no signal from them for a good two and a half hours. We were starting to get worried when the return signal came. They had reached a stream passage three or four feet high which they followed downstream for an estimated two thousand feet. The passage hadn't ended but they were short of time. They passed a very promising inlet which would have been on easy climb if they had not just had wet-suit socks on their feet! They only glanced upstream but thought that it might be possible to go that way. Both were impressed by the formations, especially by the variety of colours and also by a "forest" of mud stalagmites about eight inches high in a chamber which they named "Hall of Forests". They also passed many more chambers.

There was then no time for John Southworth and Jack Pickup to dive so we left the cave, getting out at 5.30.a.m. just in time for J. Ogden and J. Southworth to get to work at Burnley! Some diving gear, including a bottle was left in the cave, as it was planned to return the following week-end.

However, on the next Friday night Ken Pearce went down to do some blasting, and on coming out met the owner of the nearby bungalow, who



said that he objected to people going down the cave as it might contaminate his water supply. As he was deaf argument was difficult, so it was left at that. When we came to dive on the Sunday though, the shakehole had been completely filled and carefully turfed over!

We saw the Farmer, who had given us permission to enter the cave, and he said the bungalow owner - his brother-in-law was bit of an eccentric, but didn't stop there very often. When he went we could reopen the cave and he (the farmer) would contact the land-owner in Ireland to give permission for it to be permanently open. It appeared that the bungalow owner had borrowed a tractor and spent all day filling in the entrance.

Three weeks later, with the coast clear, saw us removing turf and boulders from the entrance. We had to erect a derrick and use the Land-Rover to pull out the larger boulders. After four hours hard work though, the cave was reopened with a much larger entrance than before, and we went down and recovered the diving gear and also took some more photographs.

It was two weeks later, on 26th June, 1966, that the sump was dived again. On Saturday night at 10 p.m. J. Southworth, J. Ogden, D. Stewart of the H.W.C.P.C. and W. Frakes of the B.P. C. - all members of the C.D.G. with members of Bowland Troglodytes to help carry gear, gathered outside the entrance. The water in the cave was very high, most of the entrance crawl being canal, in places with only a small air space. Only two of the B.T.C. who had managed to borrow wet-suits, reached the end, and they were so cold they went out immediately. However, they greatly eased the carry in and the divers were very grateful to them. The "amphibious" four then passed the sump and gathered at the other side, ready to explore the new passage. However, they were very disappointed to find that the passage sumped again after about three hundred feet due to the wet weather, so no useful work could be done. They then began the long trek out, each carrying a full diving kit. It must have taken them several hours to negotiate the entrance crawl, because it was 7 a.m. before they arrived back at Braida Garth for a sleep!

This was the last chance to dive before various members went off on expeditions, and is the position as we go to "press". The B.S.A. have been contacted with a view to pump out the sump. They think it will be possible, and we hope to arrange a date after the summer expeditions.

Frank Barnes

CHRISTMAS DAY DOWN HAMMER POT

On Christmas day 1964, the Happy Wanderers were having a discussion in Ingleton transport cafe whether to attempt Hammer Pot on Fountains Fell as arranged about a month earlier. It had to be a night trip because it was hard to get permission for access to the fell at this time. Although about six of us were keen on going, the other half of the club were not because all the parties and drinking etc. were more tempting to them. Those of us that decided to go soon found ourselves being driven up to Fountains Fell.

The weather was bad enough down in the valleys, but when we got onto the high ground the weather was appalling, with blizzards and drifts all over the roads. On reaching the car park at the entrance to the track that led to the shooting hut on the fell, the six of us started to walk up to the hut with our caving gear. It was a real bone freezer. If anyone was going to pack in that night it would be on the walk up, and in fact two people had to turn back with cold and sickness. When the four of us had changed we had not far to walk from the hut to Hammer Pot, about a quarter of a mile down the track and fifty yards to the left. The pot is at the bottom of a small shakehole and a few slabs lie over the entrance. The way is under one of these slabs and through a flat crawl for a short distance to a twenty foot rope pitch. After this a short walk down a high passage leads to the notorious stemple passage, a tight rift with sharp knobs of rock on the walls. Ken Taylor was the first to go through: he did not find it too bad and told us the that the thing to do was to traverse on at the same level as we started all the way to the end and then drop down. John Ogden went through next, and he too being small like Ken did not find it too tight. Then came my turn I found it very tight especially at the end where we dropped down.

There were several stemples jammed across the rift and I couldn't see much use in them going down. Dave Midgely followed me but found it too tight, and after passing me his tackle he set off to go out.

I dropped the tackle through to the others, who were waiting in a small chamber for me. I had difficulty in getting through, but I eventually popped through the roof of the chamber like a cork out of a bottle, and swung down to join them. The passage from here was easy walking for quite a way to a fifty foot pitch. This was nice and easy, against one wall with a trickle of water going down. By the time

I reached the bottom the others were on their way to the next pitch.

When I arrived at the third, a twenty foot pitch, I found it ready laddered. After walking a few yards from the bottom of this, I dropped down an eight foot cascade and I saw John and Ken waiting for me in a

small chamber with crawl leading off. Although we had not heard much about it, this was Sludge Crawl and proved to be the crux of the whole trip. It was about eighteen inches to two feet high and three hundred foot long with a deep canal all the way and only a four inch air space for the last fifty feet. On the floor under the water was a deep layer of sticky mud. John led first in the-crawl and Ken followed him, both carrying twenty five feet ladders: I carried a rope.

We all found the water very cold and our tackle and bodies sank in the mud, making our progress very slow. I think the main thing that kept us going was the sound of the loud roaring and banging of the water in the Outfell Master-Cave. I was left quite a bit behind by the other two, although I could just hear John shouting back "I think I'm nearly through". It seemed to take hours to get to the end, but when I finally broke through to the master cave things looked quite different from the miserable crawl. I found myself in a passage about eight feet wide and ten feet high with a large fast flowing stream coming down the passage from the left.

By this time the others must have been half way down the master-cave which is about five hundred feet long. It looked like a fast easy sprint to the last pitch, but I was sickened when I kept dropping down deep holes hidden by the stream and immersing myself up to my neck in water, so I had to pick my way carefully. After climbing down a cascade of fifteen feet, and trying to avoid the water which was coming at such a force as to knock you over. I could hear the others shouting over the noise of the water. When I reached them they were looking down a fifty foot pitch which looked impossible because of the volume of water that was going down, but we noticed a dry passage opposite to the one we were in about ten feet lower down.

we traversed round to this, which was quite easy although exposed. Once we were all in this passage we decided that each one of us would go down the pitch and return straight away without untying the life line. When we had all bottomed it and were assembled back in the dry passage again, there was no shouting because this time we were quite tired, and none of us felt up to dragging that ladder and rope through Sludge crawl again. So we rolled the tackle up and left it at the top of the the last pitch. Then we started to move out.

As we trudged back up the master cave I thought of Sludge Crawl, the coldness of it, the mud and grit eating its way through my woollies and rubbing into my skin and also of the tight rift. How would I shape getting back through that in a tired condition? But we had beaten it to the bottom, what sort of fight would we have to put up on the way out? When we reached sludge the water didn't seem any higher, so it was probably freezing on the surface. I don't think we spoke to each other on the way through. There was nothing much to talk about except that it was again miserable and we were glad when were out of it.

After this we decided to leave the next two pitches laddered as we would need all the energy we had to get ourselves out without carrying tackle as well. I found both pitches quite easy, but I was dreading the tight rift. Oggy was first to go up into the rift and I watched him swing into the hole in the roof of the small chamber, When he was through, he waited for me as it was my turn next. Now I had to stand on Kenny's shoulders until I managed to squeeze my arms and shoulders through. But the hard part was still to come: that was getting my gut and rear end through. It was obvious after what seemed to be half an hour's struggling that I would not have got through without the help of the other two. I had to be pulled by Oggy and pushed by Kenny. I was completely helpless and felt like crying, but my friends managed to haul me through, although I gave Ken a nasty kick in the eye while I was struggling. He was so pleased to see me through that he never complained about it. I found the stemples a godsend for gripping on to. By the time I was at the top of the first pitch my light was almost out. I shouted to Oggy in front of me who said to keep to the stream bed, but I could not get through. Kenny had a look with his light and saw that I was trying to squeeze through a two inch crack. The correct way was a small mantle-shelf into the entrance crawl. I could now feel the gusts of cold air blowing through the entrance and I know our trip was nearly over. We pushed through the snow which was now nearly blocking the entrance, and found the blizzard still blowing. It was only a matter of an hour to the warmth of the cars and our friends. As we walked down the track towards the shooting hut, the three of us knew we had had a hard fight against nature. We were cold, tired but satisfied. A team went down a week later to de-ladder but found Sludge Crawl completely flooded, and so just de-laddered up to there. Incidentally Dave Taylor broke his ankle walking across the ice covered clints on the way to the entrance that night. What an excuse!

A fortnight after this another team went down but found the water in Sludge higher than on the original trip, there being only two to three inches of air space over the last fifty foot. As it was sleeting outside when they came down they returned through Sludge Crawl as soon as they reached the master cave for fear of the water rising, so the tackle still remained at the top of the last pitch!

Everybody by now was fed up of night trips down Hammer Pot, and it was decided to postpone recovery of the tackle until Spring.

However, when another de-laddering party went up they found the entrance blocked by a rock and mud fall. Hopes of an early recovery of the tackle were given up.

It was Easter 1966 when H.W. members returned to Hammer Pot with picks and shovels - and permission - to dig out the entrance. Two hours work saw the entrance open, but it was very wet and sludge would obviously be flooded. Some members went down to the start of Sludge for fun but the tackle could not be recovered, The next Friday night though the rope was finally brought out, the ladders being useless, It was a dry weekend and Sludge Crawl found to be almost dry which greatly surprised those of us who had almost drowned in it!

MY FIRST CAVE DIVE

If you walked into the H.W. Hostel at present you would be excused if you thought it was a Diving Club. Bottles, demand valves, flippers masks, snorkels, weight belts, wet suits and even a compressor, are scattered all around. However, this isn't surprising when you consider that eight members of the Club are also Cave Diving Group members, and another five have cave diving experience.

I am one of the five; I have been through Langstroth sumps (one and two!) I did not want to, but our C.D.G. members are very vain, and decided that they wanted photographs of themselves at the other side. I was the only available fool with a caving camera and diving experience. Of course they couldn't tell me, or I wouldn't have gone, so they carefully made arrangements to dive Dale Barn, suggesting that I take photographs in the new passages before the sump. This was, of course, to make me bring my camera, and also explain the presence of their diving gear.

On Saturday night they loaded all their diving equipment into Bolton Speleo Club's Land Rover, arranging to meet at Ingleton at 12.0O.a.m. on the Sunday (I think- anyway they came at that time!) but told me to meet at 9.3O.a.m. Sure enough I was there with the rest of the lads at 9.15.a.m., and everybody moaned about the Bolton lads letting us down. At 12.00.a.m. sharp they arrived, but everyone had decided that it was too late to do Dale Barn, though we still had time to take photographs in Langstroth. Before I had time to think of an excuse I was bundled into a car and driven off to Langstrothdale.

It was a beautiful May day, and the drive over was marvellous. Tourists' cars were everywhere, and Len Platt was disappointed at not hitting any with his Land Rover - he has only wrecked two this year and was hoping for more. However, we arrived safely and donned our wet suits. Several of us had a quick snorkel in the river, admiring the large trout, while the diving gear was sorted out, and then we ascended the hill to the cave entrance. Several tourists followed us in evident wonderment. Everybody went down the tight entrance except John Ogden, Tony (Silent Sam) and me. We then found that none of our lights was working. However, there being tourists around, I bravely said that I would go down to see how dark it was, and with a last look at daylight, disappeared. After about ten feet I found it very dark, but luckily at that moment my lamp came on. I shouted to the others to follow, and down thundered Silent Sam followed by John Ogden who had got his lamp working by this time. The cave is a very nice stream passage, just high enough to walk comfortably and with some very pretty formations. Carrying

diving and camera equipment was no bother, and after ten minutes walk upstream we reached the sump. J. Pickup and Mick Melvin were already kitted up, and soon went through the sumps, which are forty foot and ten feet with a twenty foot airspace between. J. Ogden then went through taking my camera, and he returned with a spare kit. I was suddenly surrounded by people strapping diving equipment onto me. A bulky bottle appeared under my arm and a weight belt was strapped around my waist. I pulled on my hood and mask and a demand valve was hooked round my neck. I tried to stand up to move towards the sump, but was weighed down and had to proceed in an undignified crawl. My hood covered my ears making it difficult to hear and my mask restricted my vision. I felt like a fish out of water.

Instructions were shouted to me: hold the line in your left hand and keep to the right wall. Move slowly and whatever happens don't panic, man is his own greatest enemy underwater. Try to keep a hand on the pillar valve to protect the vital air clamp. Check valve, words of encouragement, dive. Immediately everything is quiet except for the sound of breathing. The mud has been disturbed by the first divers, and visibility is only about a foot. I can just see my orange gloved hand holding the courlene line and occasionally a flake of rock comes into view. I move slowly holding the air clamp and pushing off the roof with my feet. Suddenly it becomes too tight to get through. Stop and think, I have not felt the right wall since starting. I reach out but cannot touch it. I move back and to the right until I can touch the wall. It is easy now. I move slowly forward again holding the air clamp, but touching the wall every few feet. Soon I emerge at the other side. A quick tramp through the airspace and a further ten foot dive brings me to the other side. It is easy, as long as the equipment keeps working, you don't get lost, trapped, or run out of air – or panic.

The passage at the other side is short but beautifully decorated with flowstone and curtains of many different colours. At the end is a large chamber with a stream coming in from a passage about fifty feet up the wall. Several attempts have been made to reach this passage without success. We had planned to rawlbolt a piece of angle iron to the wall to use a scaling pole in two stages, but a convenient ledge was found so we didn't bother. I reverted to photographer at the other side of the sump, and happily took about ten photographs, both colour and black and white. The sump held no horror on the return and we soon got back into the sunlight. Incidentally, although this article is light-heartedly written, it must be obvious that cave diving isn't. All the members of our club who have dived have done British Sub-Aqua Club training up to third class standard, which must be regarded as the absolute minimum training, even for passing an easy sump like Langstroth.

It was a Friday night in the Helwith Bridge Hotel. I was sitting with a group of friends discussing the following days caving. Bill Frakes suggested that John Southworth and I should go diving with him in Rowten Pot. I said I wasn't interested as it would most probably be submerged right through to Keld Head. Bill laughed and said, "You've got a surprise coming." On hearing this I immediately became inquisitive and started asking for more details. Little by little the tale came out.

It seemed that three weeks previously, the Brook brothers of Leeds University Speleological Association had pushed a low crawl in the final chamber of the Swinsto-Simpsons system, and after several hours digging had broken into the Master Cave for Kingsdale. They had made a rough survey and found that one of the inlets into the Master Cave came very close to Rowten Pot sump. As the inlet ended in a sump it seemed almost certain that this was the other side of the Rowten Pot sump.

Saturday, 2nd July, 1966 came, and in no time at all we were at the sump in Rowten Pot. Bill Frakes was lead diver and I was stand-by diver. Within a minute of leaving base he signalled back for me to follow. After a short dive of approximately twenty-five feet I joined him in a large air bell. We dived again and after about ten feet reached a second air bell. From this we could see a small air space leading off. A further dive of several feet brought us into the Kingsdale Master Cave. We belayed the line and returned to base to give the news to our excited colleagues. Soon everyone in the party had passed the sump, and we all set off to explore the Master Cave. It was while we were kitted up to go back through the sump that D. Cobley suggested leaving Rowten laddered and next day laddering Swinsto and doing an exchange of parties through the Master Cave. We all readily agreed and arranged to meet in Kingsdale on the Sunday.

Sunday dawned fine and clear. The Swinsto party set off one and a half hours before us, in order to get the pot laddered, while we spent a lazy ninety minutes sunbathing at the entrance to Rowten. We then quickly descended and arrived at the sump in just over thirty minutes. We dived through and were just in time to meet the Swinsto party. We exchanged greetings and passed the diving gear to them, and then made our way to Swinsto and out. Five cavers from each end completed the exchange. They were J. Southworth, J. Ogden and F. Barnes of the H.W.C.P.C. A. and D. Brook of the U.L.S.A, W. Frakes D. Cobley, P. Livesey and C. Vickers of the B.P.C. and K. Taylor a loner! Three members of U.L.S.A also went down Swinsto.

We arrived at the surface just in time to help the Rowten team up the last pitch with the tackle and diving gear. Then it was off to the transport cafe for a well earned meal.

The trip was thoroughly enjoyed by all, and I can honestly say that it must be one of the finest caving trips in Yorkshire. When going down Rowten one gets the big pot feeling of long ladder pitches, crashing waterfalls, and exposed positions. The Master Cave gives one the feeling of depth and age, with the wide deep water canals, and lower down the rapidly flowing stream with inlets flowing in from either side, which convinces you that you are in a true master cave, Then Swinsto puts the final touch to the trip, it being as always a very sporty and interesting trip with which to finish off.

It is interesting to note that this is probably the first time in Yorkshire where exchange parties have used diving equipment to overcome an obstacle. There may be people who condemn it, saying that it is reckless, and adds more danger to an already supposedly dangerous sport. However, I m sure there are others who will welcome this sort of thing as I do, as a shot in the arm for the poor caving standards that now exist in Yorkshire.

If anyone is thinking of free diving the Rowten sump they are strongly advised not to, as the dive as it stands would make a very difficult free dive. The line as it is now belayed, tends to pull over into a tight section and one needs time to find the correct way. With a small amount of digging though, and the correct belaying of a thick hand line it should be possible to free dive into the Master Cave.

NOTE

A fortnight after this trip, five H.W.C.P.C. members, who were not on the original Rowten – Swinsto exchange completed the first Rowten - Simpsons exchange. J. Cunningham and L. Platt went down Simpsons on a mixture of Red Roses and Leeds tackle, and J. Rushton, J, Pickup and J, Morgan took the diving equipment down Rowten. They arrived at the sump more or less at the time, and exchanged parties, J. Pickup kindly volunteering to return out of Rowten to help de-ladder and pull out the diving gear. Again everyone was thrilled by the sport and variety of the trip.

for a full description of the Master Cave, see the 'postscript' to the article entitled "Kingsdale" (page 45)

MALHAM COVE

John Ogden and I visited the Cove one summer night with the intention of diving in the resurgence to see what the possibilities of further exploration were. We had heard that the length of previous exploration was seventy feet to a slit too tight to allow anyone wearing diving gear to pass, and also that the entrance to the Cove had to be dug out which took many hours on previous dives there. On checking the gear we found we were short of weight belts and a diving line, but this did not put us off. On reaching the Cove a coin was tossed and Oggy had the pleasure of diving first, He kitted up and I slipped a loop over his wrist, which was one end of a 120 foot nylon climbing line which was to be a make-do guide line. It was not long before he found the right place to dive, but things seemed to be going badly for Oggy, who pushed frantically off the bottom lip of the cave in a desperate effort to make headway. This went on for ten minutes or so, after which he surfaced and told me it was very tight, with plenty of loose boulders about, and the current was very strong, making it awkward to keep down without the aid of a weight belt. He then took the bottle off and gave it to me so that I could have a look.

Putting the loop round my wrist I dived and immediately was jammed by a boulder sticking into my chest. I removed this and then pushed my way forward down the crack. Progress was painful and it took quite some time to pass the four foot tight section and much precious air had been wasted in the struggle. Once through the entrance the passage developed into a wide bedding plane about two feet high which I followed for seventy feet in good visibility. The tight section was directly in front of me and on looking through it I could see quite a large chamber, so at once I inserted myself into the squeeze. It could be plainly seen where other divers had tried this by the abundance of scratch marks on the rocks, and I was for giving up at one time when one of the projections pulled so hard on the high-pressure hose that it nearly ripped the demand valve out of my mouth. However, another few hard pushes on the side and I was through into the chamber, whose roof I had the pleasure of meeting only a second or two after the squeeze.

Stupid as it was, I had forgotten I was not wearing a weight belt, which automatically made me shoot up to the roof at quite an alarming speed. That was not so bad after the initial shock - the problem was how to get back down again for the return journey! Checking on the contents of the bottle I noticed it was only quarter full, so after a quick look round the chamber to make sure the dive did carry on, the return journey started.

The best way I found was to do a hands and knees crawl upside down on the roof slowly making my way to the crack. This was quite funny because twice I shot back to the roof of the chamber and it was only on the third attempt that I managed to get my hand on the upper edge of the crack and pull myself in. It was a lot easier on the way out owing to the force of the current, and once through the tight section I shot off down the seventy foot bedding plane and up the entrance rift to bob up to Oggie's welcome light. We had had enough for one night and decided to go home and return to the dive another night with much more equipment.

On the next visit, a week later, were four more divers, myself, Oggy, Dave Stewart of the Happy Wanderers and Bill Frakes of the B.P.C. plus hordes of other members of our Club and Bradford and also two Newspaper Photographers. The plan was for Oggy and me to dive first with two hundred feet of courlene guide line and to go to the end of the line and belay it if no air space was met.

I went first and told Oggy to follow me as soon as I was through the tight entrance section. This I passed and finned my way onwards to the squeeze, at which I removed my main bottle, pushing it in front of me with the coil of guide line, but keeping my small reserve set on (the reserve set is another bottle and valve which is used if the main set develops a fault.) I then put the main bottle under my arm and set off swimming again, paying out the line as I went. The type of passage changed from a chamber into the kind of bedding plane passage encountered on the first section of the dive, and this I followed for some thirty feet when a mechanical fault developed in my reserve kit. Masses upon masses of bubbles were streaming out of the reserve demand valve and knocking my mask off, which I had to keep clearing before I could get any sense of direction. It was pointless for me to go on with the dive so I decided to return to base. It was as I was turning round, that the wrist lamp bracket which Ken Taylor specially made for me to use on this dive, got jammed in a rift, I struggled for quite some time to release this and it was only by one very sharp painful pull that I did it.

On returning to the squeeze I found Oggy struggling through, who on seeing me encased in bubbles started to make his way backwards out of the squeeze. I then took the main bottle from under my arm and pushed it in front of me and negotiated the squeeze. Once through we both made our way back to the entrance and out of the rift to daylight.

The story was told to Dave and Bill who both decided to have a dive to where I left the line reel in the bedding plane and carry on exploring from there. They negotiated the squeezes easily enough and on reaching the line reel set off up the bedding plane for another forty feet, until they found they were both very short of air, so they returned to base, floating the line out with them. The total length of line from the entrance to the farthest point was one hundred and fifty feet, the last forty feet being dived by Dave and Bill.

The passage we are now diving in does not seem to me to be the main stream passage because the first section of bedding plane between the entrance and the squeeze, has quite a fast flowing current in it, and the second part of the cave has hardly any flow at all. The water flow seems to be lost just past the squeeze and it would be a good idea to have another look round the chamber.

OGOF AGEN ALLWEDD

SOUTHERN STREAM PASSAGE – AN UNEXPECTED DISCOVERY J. Morgan

Ogof Agen Alwedd, or to give it its common nickname 'Aggie' is situated in the centre of the vast amphitheatre of the Llangattock escarpment near Crickhowell in the Black mountains area of South Wales. It was first explored in 1946 by the South Wales Cave Club for a distance of approximately 1500 feet. In 1957 the Hereford Caving Club managed to pass the first boulder choke and break into the main chamber and eventually the main stream passage and beyond. The Hereford Caving Club and the Chelsea Pothole Club, though not necessarily together, then continued exploration of all major passages and this was more or less completed by around 1960.

At Easter 1962, Harold Lord was just finishing the first detailed and accurate survey. Ken Pearce, Bob Toogood and I were checking over to see if he had missed anything in the way of new passages. We entered the cave to have a look at Southern Stream passage, which was at that time a low crawl of about a thousand feet long. It took us about an hour and a half to get to his last survey point, which was just where the stream disappeared into an uninviting low crawl about twelve inches high. We went down to have a look, and after about a hundredfeet it sumped. However, on the left were a lot of loose boulders and shale, and as we had plenty of time, we decided to dig. Three digs were started and after about ten minutes easy digging, Bob Toogood broke through into a small passage with lots of crystals over the floor. It was obvious no one had been in before. We went down the passage for about a hundred feet and came to another choke over the top of a large flat slab. This proved more difficult to dig than the previous one, but after taking turns at digging in a very awkward position for about an half an hour, I fell through into the stream below in a shower of rocks. The others followed and we pushed on downstream in high hopes. The way on didn't vary much, it was either simple crawling occasionally over boulders, or low walking, and we didn't meet any obstacles until we came to a ten foot pitch. We knew we could get down quite well, but we weren't so sure about getting back up, so the next hour was spent carrying boulders up from the passage and throwing them down the 'pitch' so as to fill in a pool at the bottom, thus providing a 'cone' to climb back up. This done, we carried on down and into the stream passage again. Here the passage seemed to alter into a rift type of passage with various little waterfalls about two feet high. As we went further down, the rift began to get higher and the only thing that held us up were loose boulders which were removed if possible. After continuing for about two hours the rift began to get choked with mud at stream level, and we had to start traversing along good ledges about twenty feet up.

After three hundred feet, we emerged at a 'T' Junction - 'The Master Cave.' It was a wonderful sight, slow moving black water twenty feet wide, and at that time over five feet deep - we did not realise it was nearly two feet above normal. It was then decided to return at a later date with better equipment.

The way back was very tiring and eventful only in that we came out with only one light still burning fourteen hours after leaving the entrance. Three weeks later Ken Pearce and Harold Lord returned with various other people to go as far as 'T' junction and survey out to the entrance. Ken did not have time to stay with them, and once they had started surveying he set off out on his own. About three quarters of the way out his light failed and he had to wait about eight hours until the surveying party caught up with him. There must be a moral in that somewhere! They eventually got out after eighteen hours with nearly four thousand feet of passage surveyed.

A couple of weeks later we returned with a much larger team than before with the intention of exploring, photographing and surveying the Master Cave. I went upstream with Harold, and Ken and Bob went downstream. Upstream the cave got bigger and the water soon became only knee-deep running fairly fast, except in occasional deep pools. In some places the passage was a hundred feet high and the walls fifty feet apart. After walking up this passage for about half an hour, noticing many high inlets on the way, Ken Pearce and Bob Toogood caught us up. They told us that downstream only went for three or four hundred feet through deep water to a large sump.

Soon we come to a deep pool completely covering the floor, with the stream entering down a waterfall about six feet high at the other side. Various ways of getting round this were attempted but eventually the only way across was found to be by swimming, and climbing straight up the waterfall - quite interesting to say the least! Above the waterfall the passage developed into a large shattered chamber (now known as the fifth boulder choke) and after trying to dig through, we realised that it was the end. Slightly disappointed, we turned round and started to survey out. Before we had arrived back at the top of the waterfall though, Ken and Bob had managed to climb up to an inlet (now called BIZA passage) and shouted down to say that they were off to explore. Harold and I continued to survey back to 'T' junction, slow but fairly easy owing to the spaciousness of the passage.

Eventually we all met up again at 'T' junction, Les Salmon and his friends having turned up and surveyed the four hundred feet to the sump. Ken and Bob said that the inlet went for quite a way before ending up in two low crawls.

The trip out was again uneventful, we emerged in twos and threes over a period of about two hours. The total time underground this day was approximately twenty hours.

The survey was eventually plotted out and it was realised that the Master Cave was actually the main stream passage, and the fifth boulder choke is only a quarter of a mile, and in a direct line from the fourth boulder choke.

We then released the news of the discovery, and the Chelsea Pothole Club kindly surveyed 'BIZA' passage for us, contriving to find a passage of their own running off (Bat Passage) in the process. BIZA passage was plotted on the survey and was found to come within fifty feet of the fourth boulder choke. The total length of new passage explored was about two miles. Since then the sump has been dived by Steve Wynn-Roberts and Fred Davis of the Cave Diving Group. It went for a hundred and fifty feet to a submerged pothole in the floor, of unknown depth.

There has been a certain amount of digging at the end of BIZA passage, but so far without result. If it could be connected with the fourth boulder choke it would give one of the best 'round' trips in the British Isles.

EXPEDITION TO THE CENTRAL PYRENEES 1965

Jim Cunningham

In July, 1965, the Happy Wanderers organised an expedition led by Ken Taylor, to the Ice Caves of the Central Pyrenees. A journal is being published giving detailed information of caves found etc. this is just a short summary.

On Tuesday 6th July, 1965, the ten members of the expedition met in the small Spanish village of Broto - the nearest village to the caves. Six members had hitch-hiked down, and four travelled by Bedford van, with the equipment and food.

Tuesday night was spent on a camp site near Broto, and on Wednesday morning the equipment and food were sorted out. It was then decided it would be necessary take up two loads of equipment of about sixty pounds to our base comp - about five hours walk from the nearest road. Wednesday afternoon was spent in the camp pool swimming and sunbathing, until 6.0.p.m. then we struggled into our pack-frames loaded with sixty to seventy pounds and staggered off on the long walk.

We hoped to get about half-way on Wednesday before dark, then sleep, and carry on in the morning. However, a thunderstorm developed and we were forced to take shelter after about one hours walk. Luckily, we found an overhanging rock which gave perfect shelter, and spent the night there. We set off at 6.00.a.m. on a beautiful morning and arrived at the plateau - our base camp - at about 10.00.a.m. after an exhausting but beautiful walk.

We were surprised to find border guards on the plateau, and rather embarrassed when, swinging their Tommy-guns on their shoulders, they asked us for our passports, which several of us had left down at the van! However, after much gesticulating we got it over to then that we were not going over into France, but camping on the plateau. They were quite friendly then and helped us on with our pack-frames, which we appreciated greatly, as most of us could not get off the ground with our pack-frames on our backs without help. We then visited the mountain refuge which we had seen marked on the map. It was quite a large place, sleeping eighty-five and sold all sorts of food and wine - which pleased us greatly.

After refreshment with wine, we staggered the last fifteen minutes walk to a patch of grass next to a stream which we had chosen as our camp site and collapsed in heaps! We then ate a much needed meal, pitched our tents, had a short rest and set off back to the van with empty pack-frames. We arrived back about 6.00.p.m. packed another load onto our frames and walked up to the rock shelter again, where we again slept, setting off early in the morning. We arrived back

at our camp about 12.00.a.m. on Friday and spent the afternoon eating and resting and sunbathing in the hot sun.

On Friday evening we carried our ice-axes and crampons across to a steep snow field about fifteen minutes walk from our camp site to practice snow and ice climbing techniques. These were new to some of us and we had great fun learning to glissade, cut and kick steps and fall in the correct manner on the steep snow. These techniques came in very useful later.

On Saturday 10th July, we visited our first ice cave, Grotto Casteret, which is very well-known. It was about two hours walk from our base camp through beautiful mountain country, though quite hard going in places as we climbed about 3000 feet. The cave is very, beautiful, at the entrance is a large chamber with a huge ice-lake floor. At one end are large columns forty feet high, and at one side, the floor falls away with a forty foot drop into a smaller chamber with fantastic ice formations. The ice is very clear and the rock behind can be seen through four or five feet of ice. In the centre of this chamber is a huge ice flow with a beautiful carved surface with delicate fingers of ice of all shapes and sizes protruding.

The cave continues with smaller chambers all beautifully decorated, until it emerges into sunlight again, on the top of a small peak with a beautiful view of the mountains. We spent about three hours in the cave, and then the party split up, some going to look for new caves others going back to photograph Grotto Casteret.

Many entrances were found by the cave hunting party, and it was decided to go up the next day and bivouac in a small cave near the entrances, at about 8000 feet. This we did, and during the next three days we explored, surveyed and photographed six ice caves. Most of them were fairly short, but all were very beautifully decorated. Exploration was not easy, as all the caves were entered at their points of resurgence, and so the passage goes up, rather than down, as in a normal cave or pothole. Many steep ice-slopes were climbed, and in one cave, a fifty foot rock climb was necessary to get into a continuance of the cave, in another, a swim across an ice-cold lake near the entrance was necessary.

The cave that we slept in was very small we were almost sleeping on top of one another. The floor was covered in rocks, which were not very comfortable, but the view was fantastic. There was a large snowfield just in front of it, with many drainage channels cut into it, and behind this the reddish peaks of the Spanish Pyrenees.

On the last day of our bivouac we finished our survey work and decided to climb several peaks above us, as we were then nearly at the

top. First we climbed Gasco, which took about an hour, half rock climbing and half snow climbing. The view at the top was tremendous the sharp and snowy peaks of the French Pyrenees forming a backcloth to the green Gavarnie valley 5000 feet below. We then ridge-walked across to Tora, and then glissaded back to our bivouac in about twenty minutes. We packed our equipment and walked back to our base camp, where we ate for several hours, as we had been short of food in the bivouac!

The next day we climbed Mount Perdido, the highest mountain in the district, and the one which overlooked our camp. The weather was perfect, as it had been all the time, and the view again was marvellous. On the way down we went onto the Marbore, where we heard there were some large shafts. Near the top we found some numbered shafts, which the Spanish had been working on. However, lower down we found some large shafts which seemed untouched. A stone thrown down took four seconds to reach a ledge and another two seconds to reach the bottom - an estimated depth of four hundred feet. We were very excited and decided to bivouac near the shafts as soon as possible. However, it was then Wednesday and three members of the expedition had to be back at work by the following Monday.

On Thursday morning we investigated a pothole found near to our camp by one of our members who had been ill on Wednesday, and who had come across a large shaft with a stream coming in at the bottom. We laddered the first shaft which was thirty feet deep and then a ten foot climb led into a stream passage. Another thirty foot pitch soon followed, very wet, followed by a short passage to a sump. This was dived to a small bell-chamber, but another sump followed. It was, however, quite an interesting find.

On Thursday afternoon we walked down into the valley, and drove to Broto. Here we had a slap-up meal in a restaurant, which we all enjoyed immensely. It was a big change from our usual diet of Instant Mashed Potato, Corned Beef, and Vitamin pills! Friday was spent driving our three friends, who were going home, to a railway station at Tarbes, in France, and on Saturday we had a day of rest, sunbathing and swimming all day. We walked back onto the plateau again on Sunday afternoon. It began to get cloudy on the way up, and started to rain quite heavily.

We had taken all the tents, except one, down into the valley with us, to save weight when we were all going down for the last time. Also we didn't think we would need them when we were bivouacking on the Marbore, and there were plenty of small caves on the plateau in which we could sleep. We picked a cave to sleep in and put our equipment in. However a very heavy thunderstorm then started and

we found water soaked into our cave from all directions! We hurriedly looked for another, and found one with a reasonably dry, though uncomfortable floor for sleeping on. The thunderstorm continued all night with almost continuous sheet lightning. We got fairly damp in our cave, but not too bad to sleep. Next day (Monday) the weather was still bad with heavy rain and thunder every hour or so. Two of our members went on to the Marbore to see what conditions were like up there, while others went on to next higher plateaux to investigate several small shafts, found when walking across to the ice caves. About ten shafts were descended two to a depth of seventy feet or so but no significant passages was found, the lads who had ascended the Marbore said conditions were very bad up there, and there was no hope of sleeping there until the weather improved.

Next day was still unsettled, so we went to look for a shaft that was found on Monday which led into a large stream passage. This passage was eight hundred feet long ending in a sump, which was dived for about fifteen feet but no airspace was found. This cave was then surveyed and photographed.

In the evening the weather cleared up end several of us went for a walk onto the lower levels of the Marbore. Here we found the camp of an expedition from the Spanish Institute of Hydrology who were doing a hydrological survey of the area. They had a lot of caving ladders etc. and earlier had offered to lend us some if we needed more than our own five hundred feet of ladder to descend the shafts on the Marbore. They showed us the work they had done in the area - descending, numbering, surveying all the shafts in their area and dye-testing all water found. They said they were going to do a mile long cave on the Marbore the next day, with a two hundred foot ladder pitch and asked us if we would like to go. We were very pleased at the idea of doing a long cave, even a well known one, so we said we would like to go. It was arranged that we would meet at their camp at 6.30a.m. next morning.

We rose at 4.30a.m. while it was still dark. However it was 6.00a.m. before we were ready to start due to the large breakfast we needed to last all day and the low pressure at which the stoves work at high altitude.

As the Spaniards camp was a good hour's walk away we decided to go straight up the Marbore and into the area of the cave and wait for them there. We arrived near to the cave about 8.00a.m. and sat down to wait. It had been a beautiful morning but now it began to cloud over. There was still no sign of them at 10.30a.m. so we decided that we must have missed them as we did not know the exact position of the cave entrance. It was getting quite cold then and we agreed to go higher up the Marbore to the shafts we had found, find a bivouac,

and leave the equipment to be brought up, hoping to come again the following day with the rest of the gear. We did this and on the way down at 2.5O.p.m. we met the Spaniards. Two of their party had been ill in the morning, and it was 9.3O.a.m. before they set off - just like British cavers! They could not find the cave they wanted to descend, and they had already been down two shafts which were not it. We helped them to de-ladder one and then carried on down the mountain, as it looked like rain and was cold, and we had left our equipment higher up. We heard later that they did eventually find it. We did a bit of climbing on the small rocks near our cave at night.

Next morning the cloud was low again - there had been a heavy thunderstorm during the night. The Spaniards had said the storms would probably last another three or four days.

We had a discussion and decided to go down off the mountain and do some known caves in France near Lourdes. It was agreed that three members would go up to the Marbore and bring the equipment down from there, and the other four would carry down all the equipment from our camp. We gave the food we had left to border guards and the warden at the refuge. Those going up the Marbore set off and the others packed 350 pounds of equipment onto four pack frames and burnt all they couldn't carry including one and a half gallons of paraffin and ten pounds of carbide.

The track was again staggered along by four Englishmen with huge packs. Later to be followed by three tired Englishmen with huge packs. The river in the valley, which we had to cross was in flood, and it was quite difficult to cross with packs. We picked the widest part but it was still over knee deep with a very strong current. Luckily no-one fell. We met at the rock shelter, where we slept on the way up, at about 9.30.p.m., the four coming direct from the camp having been down to the van with the packs and back again. The next day (Friday) we drove to Pau, where we located some local cavers who told us where to go to find a good cave. On Saturday night, in heavy rain we descended the cave, spending about seven hours exploring and photographing, coming out at about 2.00.a.m. On Sunday we drove to La Rochelle, where we swam and sunbathed for two days. We crossed the Channel on Wednesday night, and after spending most of Thursday in a garage getting the van repaired, we drove to Bury. On Friday we went to Ingleton, and finished the

expedition in good style with a difficult but homely Yorkshire pothole.

TURBARY POT

Mike Myers

Turbary Pot was found on a Sunday afternoon at the beginning of October 1964, when three members of the Club went forth on to the battlefield of Speleology in search of new potholes.

The pubs had closed, and as nobody had thought to buy any bottles, it was decided to drive up Turbary Road in the Land Rover to take a look at a likely shakehole noticed previously. It was situated in the same field as Swinsto Hole, but only a few feet from Turbary Road, so we had no walking to do. The three of us disembarked from the vehicle and one of the lads took a close look in the bottom of the shakehole. He suddenly let out an excited yell, "I can feel a draught between my legs!" after various remarks such as "yes I can smell it!" we went down and started frantically pulling out boulders and digging for all we were worth (which wasn't very much) until three large boulders prevented us getting any further. We used the Land-Rover to remove these, and after another hours digging we had made a hole large enough to squeeze through into a small crawl.

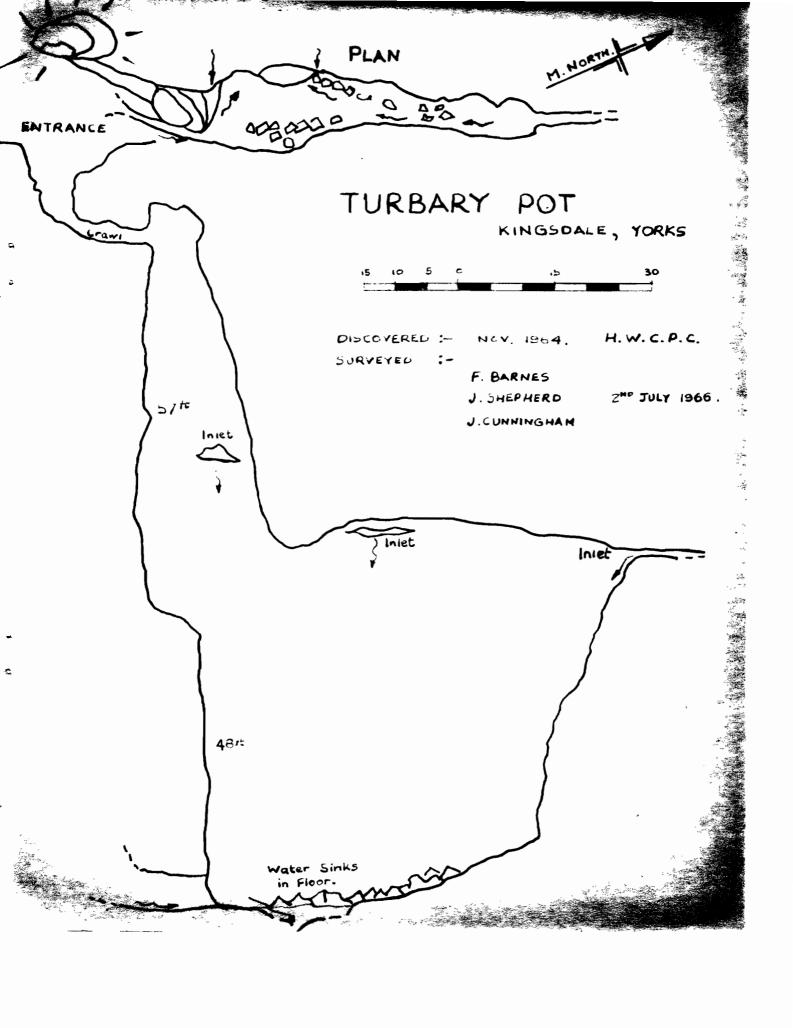
Dave Taylor went in feet first and soon disappeared. He was just saying that the passage was getting slightly larger when he let out a yell - he had nearly fallen down a pitch. The passage enlarged slightly to the left of the pitch, so he turned round in this and looked down. It was a large shaft he told us excitedly and he began dropping rocks down. There were long silences and distant rumblings - we estimated the depth of the pitch to be about two hundred feet. We hurriedly returned to the hostel for ladders etc.

An hour later, back at the shakehole, the fifteen foot crawl was negotiated and the pitch laddered, a piton Being used for a belay. Sixty feet down, a large ledge was encountered, which looked out into a large rift chamber, later named McShea Chamber. The ladder was quickly re-belayed to a convenient flake and the floor was reached after a further fifty-five foot ladder climb.

The chamber was explored and found to be approximately fifty feet long, ten to fifteen feet wide and seventy feet high. The wall behind the ladder is decorated with broad vertical stripes of white calcite. A small stream enters near the top of the pitch, and flows down the wall, wetting the calcite and making it glisten. The water also makes the limestone appear dark, the whole effect being very beautiful.

Three more small streams enter the chamber. One comes through a tight crack just to the left of the bottom of the ladder. A waterfall can be seen about twenty feet away in a small chamber, but the crack is too tight to get through. An unsuccessful attempt has been made to blast through here, but it would take a lot more blasts to be successful, and hardly seems worthwhile as it is very unlikely to go anywhere beyond the waterfall. Another stream enters down the large calcite slope at the opposite end of the chamber to the ladder. A third flows down the left-hand wall, coming from the roof of the chamber (see survey) These streams combine and sink in boulders in the floor where in wet weather a large amount of water sinks. This has been the scene of numerous digging efforts in the past eighteen months with as yet no result. A shaft about ten feet deep has been dug where the water sinks, but it is constantly silting up. However, the dig definitely holds possibilities of further extension.

The water which comes in at the top of the big pitch has been tested to come from the stream in the entrance of Swinsto, a red dye being used in wet weather. When tested in dry weather the dye did not appear, though this could have been because we didn't use enough dye or wait long enough.



COTE GILL POT

Jeff Morgan

Towards the latter end of the dry summer of 1960, P. Croasdale and I were camping near Proctor High Mark on the moors between Littondale and Malham. We had, for the past few weeks been searching and digging at various holes in the hope of breaking into something in this relatively 'untouched' area. One fault with camping up there was that because of the dry weather there was no water to be found, so we set off towards Littondale to try to find a spring of some kind, lower down the fell. As we reached Cote Gill, which is marked on the map as a stream, we found only a dry beck. We continued down the beck and eventually, after giving up hope of finding water, turned around and came back the same way we had come. We had just climbed up what is marked on the map as a waterfall (quite dry) when P. Croasdale thought that he could hear water near the edge of the river bed. We looked and found a hole about six inches by four inches from which came the sound of running water.

We decided that it was worth digging and re-sited our camp in the vicinity. After fashioning a crowbar from an old iron fence we started enlarging the hole, and within a couple of hours had found that it led to a shaft estimated to be about twenty feet deep, but still tight to get in. Owing to lack of equipment further work was postpone until the Following week-end.

The next weekend saw about half a dozen of us gathered at the dig and after about five hours concentrated work with hammer and chisel, we decided that the hole was large enough for a small person to get down. We smeared the walls of the shaft with mud and wearing only a boiler suit I managed to wriggle down with some effort. After fifteen feet the shaft came in through the roof of a large stream passage approximately five feet wide and seven feet high. I went downstream and after about a hundred feet came to a fifteen foot pitch, so I went back to the entrance shaft to get a ladder. By this time the lads on the surface were getting excited and P. Croasdale decided to try and get down. Twenty minutes later and wondering how he was going to get out, he was at the bottom of the entrance shaft. Quickly we laddered the pitch and went down. It led into a fairly large chamber with a few curtains and on the floor enumerable small skulls which eventually turned out to be those of rabbits. The water sank into the side of the chamber and disappeared under a choked bedding plane and into the floor. This was to be the limit of the downstream exploration.

On returning upstream, P. Croasdale found a bedding plane which went for a hundred and fifty feet. Upstream from the entrance went

for two hundred feet to a choke, passing a few small formations and through an aven on the way.

Coming out was difficult to say the least. The shaft was too narrow to allow the use of either arms or legs so a ladder was useless. With the sides literally smeared with mud, all we could do was hold on to a rope while the lads on the surface pulled. Painful but effective, we got out!

Later on the entrance was widened using explosives, so that now most people can get down.

The water has been tested by another member of the Club and after ten hours it appears at the stream a quarter of a mile lower down than Sleets Gill, over five hundred feet lower and two and a half miles away. Work is still going on as we feel that this could be the key to that area of Littondale.

On a sunny May morning, five Happy Wanderers climbed the hill on to Scales Moor to attack Spectacle Pot. Awesome tales from the original explorers had long fascinated us. Tales of boulders, the size of grand pianos falling at the sound of a person's cough and vertical boulder slopes.

With those thoughts in mind, the first pitch was laddered and the first passage negotiated. A small chamber was reached at the start of Splutter Crawl. The passage is roughly triangular in shape and an inch deep in water. Only the first ten feet is very tight. It ends after thirty feet with a drop through a tight letter-box into a small chamber at the top of the next pitch of twenty feet. Around the corner the passage immediately drops to another crawl, nearly as tight as Splutter, but after a few feet the roof rises. At this point a small inlet crawl comes in from the right. This was explored at an earlier date and was found to continue for fifty feet, being a tight crawl all the way. However, passing this by, Moorside Chamber is soon reached which is fifty to sixty feet high with a small stream flowing down one wall. Back again into the crawl the passage soon gains width and height. The big pitch is now near. A slab and awkward rift leads to the large chamber containing the pitch. After a struggle one can stand up alongside a large 'saddle' on the right, which is a perfect belay for the ladder.

Three of the party descended leaving two lifelining and straight away the sound of falling rock could be heard echoing up the shaft. It was very worrying for the lads at the top. The noise is truly fearful and we were not happy until somebody had returned up the shaft and let us know that everything below was O.K. The shaft is approximately forty feet across and very impressive. A ledge is reached at seventy feet and it is from here that the rock becomes loose. In the second half of the shaft the ladder hangs in a narrow cleft at one side. Climbing this section the feet dislodge many loose stones which rattle and crash to the bottom of the hundred and twenty-five foot ladder. At the far side of the shaft the way on can he seen through a small window. The first thirty feet of this is a vertical boulder slope. It is better, though rather unorthodox, to hand-hold the ladder rather than belay it, since the belay could be long and likely to dislodge boulders. Only one person at a time should descend the ladder since there is nowhere at the bottom to hide from the continuously falling boulders. To descend the vertical section, it is best to back and foot it, using the ladder with the hands only. The angle of the slope

gradually decreases till at the final wall it almost horizontal. The depth from the window to the bottom was estimated at seventy feet. The shaft is ten to fifteen feet wide and stretches up far beyond the reach of our lights, at least a hundred and fifty feet. A small stream falls down this shaft which creates a permanent rain over almost the whole floor. Perhaps someday, a way will be found through to the top of this shaft.

The return to the surface was uneventful except that a tin of carbide was spilt in the passage and we had to undergo an 'ordeal by fire' as we crawled over it. Splutter was noted to back up slightly but it was possible for most people to lift their body and allow the water to flow past. In wet weather, however, this could be and indeed has been, a real danger. We returned to the surface to welcome sunshine after five hours of really interesting caving.

Incidentally, the three hundred foot pitch, reported in 'Pennine Underground' is rather exaggerated, only a hundred and fifty feet of ladder being needed, though the total depth is perhaps two hundred feet.

Canal Cave, Nidderdale

On March 6th 1966 Mick Ormerod and I had to abandon a dive in the Nidd Head Risings at Lofthouse due to the volume of flood water present. At a lost for something to do, we decided to explore the dry river bed to the north of Lofthouse. Approximately four hundred feet above the bridge a deeply cut fissure crosses the river bed, and a small amount of water flows from below the rock face on the left hand side facing up river, and into a pool on the river bed.

Mick and I began to excavate a small hole at the base of the rock from where the water flowed, and within minutes we had uncovered a low entrance about two foot high and eighteen inches wide. As I was the only one wearing caving gear I decided to explore alone.

The first thirty foot of passage was a hands and knees crawl in water about a foot deep, after which the floor dropped away and the passage became approximately two feet wide and eight to ten feet high with waist deep water. The cave continued in this fashion for two hundred foot when the passage widened to around six feet and became about twelve foot high with chest deep water. Here I noticed an inlet passage in the roof on the right hand side.

A right angled bend followed immediately and the passage width diminished to about fourteen inches. Approximately fifty feet beyond the inlet passage, the main passage became too tight at water level and I had to duck under for a couple of feet. At this point the distant rumble of a waterfall could be heard and as I pressed on the rumble grew louder, until approximately two hundred foot beyond the inlet passage I entered a small chamber where it was possible to stand up out of the water. A spout of water was falling about fifteen feet from an obvious passage into a pool on the floor of the chamber. I had a good look around to make sure that it was possible to scale the aven without the use of poles, and I noticed another passage in the roof on the right hand side of the chamber. I then decided to return to the surface.

A fortnight later I returned to the cave with Mick Ormerod, Mick Bentham and Clifford Lancaster whom I had recruited to take some photographs of the chert bands near the top of the fifteen foot aven before we had to break them down. I managed to scale the aven without any difficulty, but unfortunately I had to break away the lose chert for safety.

At the top of the aven the passage took the form of a hands and knees crawl over a layer of crumbling chert which was coated with a calcite deposit. This looked very beautiful but I could not avoid crunching it as I passed. The roof of the passage was covered in straws of all lengths and helicities of all shapes, and there were quite a large number of long stalagmites. The stream in the section of the cave was flowing in a very low bedding plane running parallel to the main passage.

The hands and knees section carried on for approximately eighty feet, and then the overhanging shale bands forced me to crawl flat out on my stomach. We followed the passage in this manner for two hundred feet, sometimes having to dig our way through bands of shale or break down formations to progress. At a distance of three hundred foot from the top of the aven we emerged into a low flat roofed chamber six foot high and eight foot wide with a pool of water covering the floor, and our passage entering about three foot up the wall.

Mick Bentham returned to the surface at this point and Mick Ormerod and I followed a passage similar to the previous one for approximately two hundred and fifty feet, squeezing passed two very awkward right angled bends, until eventually we reached a point where Mick could just manage to squeeze through to join me. I pressed on alone for another fifty foot to where the passage took the form of an inverted 'V' and became impassable due to some stalagmite curtains. I estimated that the constriction was about ten feet long but with no room to wield a hammer it is quite a formidable obstruction.

We decided to return and explore the two roof passages which we had seen on the inward journey. The passage in the aven was followed for fifty feet to a complete roof collapse, and the other passage, near to the first right-angled bend was followed for approximately one hundred foot, heading in a line parallel to the main passage and towards the passage in the aven. This passage also ended in a roof collapse which I feel certain is common to both passages. This being an oxbow passage which has collapsed in the middle.

Conclusion.

I have not yet returned to the cave to carry out a survey, neither have I been able to dye test any possible sinks as the water is the drinking supply for Bradford. I suspect that the sink is located somewhere in the area of Howstean Gorge, as I did take a compass into the cave with me and the general direction was towards that area. There is a definite possibility to push the cave further, and an interesting point is, when the new pipeline for Bradford Water-Works is laid from Howstean the cave will certainly be broken into and eventually blocked.

LANCASTER HOLE

John Southworth

The object of the dive was the upstream sump in West-Montagues. The divers of the party were John Southworth, John Ogden and Dave Stewart of the Happy Wanderers and Bill Frakes of the Bradford. Also helping to carry gear were Jeff Morgan of the Happy Wanderers and Dave Cobley and Colin Vickers of the Bradford.

The party assembled at the entrance pitch to Lancaster Hole on March fifth 1966 with what seemed to be an impossible pile of gear for the dive, consisting of six diving bottles, five twenty pound weight belts, flippers, masks, demand valves, three hundred feet of courlene line and all sorts of odds and ends including a tool kit and a mouth organ. The carrying of the gear to the sump was very hard and hot work, the average load being fifty pounds of very awkward and bulky gear.

Once at the sump, the party had to rest some time before kitting-up. Whilst equipment was being checked, Colin Vickers played on the mouth organ, but this is rather a terrible ordeal to go through for more than half an hour. He only knows one tune and he doesn't even know that properly.

When Colin had been made to stop, Dave and Bill approached the sump and to our surprise found a line already in. Nobody had heard of any dive in this sump before, and the general idea now is that the line was washed in from the downstream end of Bull Pot of the Witches which has been dived for three hundred feet.

Dave and Bill dived and returned after some time, estimating that they had gone about a hundred and fifty feet into the sump. John Southworth dived next and followed the guideline for two hundred feet to a wooden line reel with another line attached, which he followed for a further two hundred feet to where the end was belayed. He then returned, being short of air making a total dive there and back of eight hundred feet. John Ogden then dived for three hundred feet but had to return only having a small bottle. The party then called it a day and all made their way back to the entrance pitch.

The size of the underwater passage is stupendous. It starts as a sloping bedding plane at an angle of forty five degrees, which continually becomes wider until the sides cannot be seen. This goes down to a depth of forty five feet and then the passage becomes horizontal, its height being twenty to thirty feet, and

width about fifty feet. On the first two hundred feet of this passage there is one point where neither roof, nor walls nor bottom can be seen and this must be quite big because visibility was about thirty feet. There are also three holes in the floor about thirty feet long and fifteen feet wide with no sign of the bottom which stretch the width of the passage. Also there are many cross rifts, shooting off in all directions. On reaching the end of the first two hundred feet, the roof and walls close in and the passage becomes about ten feet wide and five feet high and continues for another one hundred feet until the passage gains in height up to about twenty feet at the point where the end of the line is belayed.

The only explanation as to how the guide line has become four hundred feet instead of the three hundred feet that was left in Bull Pot, is that the first line must have uncoiled itself whilst being swept downstream. Another attempt at the sump will be made to clear up the mystery once and for all.

KINGSDALE

Since the H.W. Hostel moved to Kingsdale, much time has been spent by Club members in this area, and the work done found very rewarding. This is a revue of the work done and the discoveries made. Starting on the Gragareth side of the valley, the first big discovery was Turbary Pot found on 4th October, 1964 by Dave Taylor, Mike Myers and P. Matley. We have persuaded Mike Myers to write an account of this and the reader is referred to this on page 35.

Moving along Turbary Road to Simpson's Pot, a very interesting variation to the normal Slit Pot route was explored around Christmas 1965. This was found by Leeds University about 1963 but there seemed few people who had heard of it, so it is perhaps worth mentioning. An eight feet climb from the top of Aven Pot (prior to Slit) leads into an extensive roof series. Straight on the passage follows the lower passage to Slit Pot, as confirmed by descending one of the numerous connecting holes. If the left passage is taken however after about twenty -five feet a small window through the calcite wall is reached. A strong draught can be felt blowing through it. One hundred and twenty-five foot of ladder lowered through this comes out in the middle of a very large chamber above the final chamber in Swinsto Hole. It is very spectacular ladder climb. It starts off fairly constricted between wet walls covered completely with flowstone, but after about thirty foot, it opens out and suddenly one finds oneself dangling like a spider from the roof of a huge chamber. The chamber had obviously not been visited very often. Loose boulders were everywhere and there were also many undisturbed mud formations. The way to the bottom of Swinsto is through a hole in the floor. A fifteen foot ladder belayed to any fairly stable boulder being needed. If this hole is traversed another hole is soon reached which is climbable, and leads to a passage sloping steeply down. This ends when the mud floor sloping at about forty-five degrees meets the roof at about the same level as the the bottom of Swinsto. A dripping sound can be heard very close beyond this blockage and this would seem a very good place to dig. However, timber would be needed to shore up the loose mud and a lot of mud would have to be removed to obtain a reasonable digging position. It would seem though, that a long day's digging would remove the obstacle making it possible to find where the Swinsto water sumps. Returning to the surface and walking further along Turbary Road to just past Jingling Hole, we come to another very interesting sink at about the same level as Jingling hole and about one hundred yards

further over towards Yordas, a medium size stream sinks in tight clints. About ten yards upstream of the sink was a small shakehole which obviously took flood water. Five or six years ago Mike McShea started digging here, but it was not until the end of last year (1965) that digging really started in earnest. A large shaft about ten feet deep was excavated and after several "Derek Brandon bangs" a small horizontal passage was reached. A tight squeeze led into a small 'chamber' with room-enough to lie down and even turn over in comfort. Boulders were moved and access gained to another tight squeeze going off at right angles to the 'chamber.' However, after six feet the passage narrowed to about six inches. The floor dropped in a series of steps and about six feet ahead the passage met a cross joint. The surface stream water could be heard ahead dropping in a waterfall, almost within touching distance it seemed. We returned with some difficulty to the surface. There seems to be little hope of getting in this way without extensive blasting, and even then the cross joint looked as though it may be too tight. An attempt was made to blast through where the water sinks but again this looks pretty hopeless. The main chance of getting into the system appears to be by digging out another shakehole of which there are plenty close by.

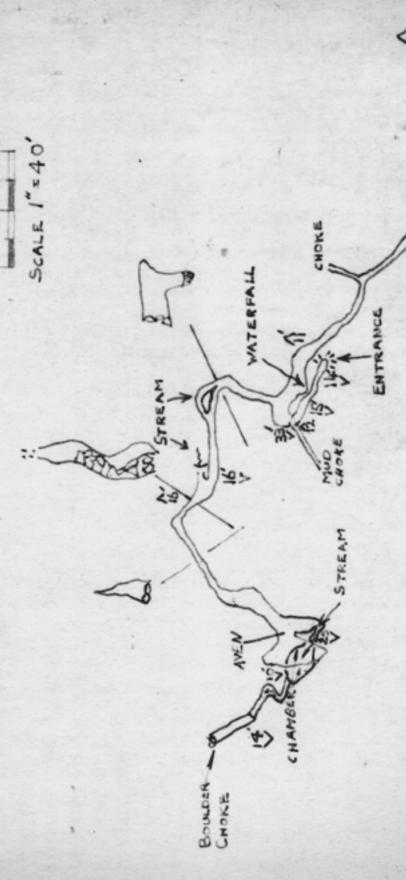
Now we come over to the Braida Garth side of the valley, Scales Moor. There are many small potholes on Scales Moor but only one of any depth - Spectacle Pot. It seems highly likely that several of the others could be pushed to this depth, and possibly into a Scales Moor master cave, so we decided to investigate.

King Pot seemed hopeful since it was already deeper than anything in this area except Spectacle. In May 1965, a tight crawl was pushed leading off at a high level from the chamber at the 'upper' end of the known cave. This soon became too tight but a continuation could be seen ahead. The constriction was blasted by Derek Brandon of Salford R.C.A.T. and access gained to two new chambers. The larger is about ten by twenty feet by eight feet high, and the roof follows a bedding plane. There are several calcite 'eggs' on the floor and short straws decorate the roof.

A lower crawl was pushed also from the same chamber by K. Taylor and J. Rushton. A bulge on the floor stopped progress after about forty feet. Much time was spent with a hammer and chisel attempting to remove this, but there was not enough room to swing a hammer properly. It was decided to blast, but unfortunately the blast caused a roof fall completely blocking the passage. However, from the survey it seems that this lower passage passes below the new chambers, so there is a chance that the blockage can be by-passed by digging in the chambers.

KING POT (SCALES MOOR INGLETON) H.W.C.P.C. SURVEY. SECTIONS NOT TO SCALE N.R.G. 707775

C.R.G. GRADE. 4.





Several of the smaller potholes were investigated, but all ended in boulder chokes. There is however still a few to be investigated. Spectacle Pot was also looked at, and afterwards there was talk of 'vertical boulder slopes' so it does not appear to be getting any safer. (see article on Spectacle Pot, Page 39)

Remembrance Pot a B.S.A. discovery found about 1958, was also rediscovered after long neglect. The entrance had to be dug out again. It is situated about one hundred and fifty yards south of Spectacle. A sixty foot shaft leads to a ledge where a stream which sinks nearby enters. There is then a further thirty feet pitch into a chamber. The stream sumps at the bottom. This sump was dived on the 19th June, 1966 by Dave and Jack Pickup. Dave was first through, after twenty feet in a tight rift it widened at the top enabling him to reach a small airspace. He could talk to the others and see their lights through a narrow crack from here. Shortly afterwards however he reached an underwater boulder choke. He returned to base and the party left the pot. Thinking about it later though, it seems quite possible this boulder choke is holding back the water and forming the sump. If this could be removed the water may drain away leaving a dry passage. We hope to attempt this shortly.

Another shaft was dug out and descended to a depth of twenty feet at map ref. SD 710772 but this was choked at the bottom.

As can be seen from the above we have failed so far to discover the Scales Moor master cave from moor level. However, we have had more success in a flood resurgence for the area which is Dale Barn - which is covered in another article.

Since this article was written, the Brook Brothers of Leeds University Speleological Association have made the biggest discovery in Kingsdale to date. They entered the Kingsdale Master Cave, making the Rowten - Swinsto exchange possible (see article by John Ogden page 22). They have kindly given us permission to publish a description of the new passage, though it cannot be complete, as I have only had two comparatively brief visits to the cave.

THE KINGDALE MASTER CAVE

If the water sinking at the bottom of Swinsto is followed downstream it soon splits into two. The right-hand stream can be followed for about thirty feet to a tight three feet drop into a pool. However, if the left-hand passage is followed through a 'shower bath' it leads to a tight bedding plane crawl. At the entrance it is quite narrow but soon gains width and brings one, after twenty

feet or so, into a stream passage about three feet high. This was the crawl which Leeds University dug out and so broke through into the Kingsdale Master-Cave. Incidentally, in wet weather, this crawl will probably be impassable, especially coming out, when the water is liable to back up in front of one's face. There is flood debris on the roof of the Master-Cave, thirty feet above the normal stream level, so it would seem that the whole system fills up in very wet weather.

The stream can be followed down in a peculiar type of passage. At the bottom it is of rectangular cross-section, two to three feet high and about ten feet wide. Above this is a semi-tubular passage of about two feet radius, which meanders in the roof of the rectangular phreatic passage. It seems that the tubular meander passage must have been formed in the pre-Glacial era, when the Kingsdale valley was much deeper, and the water-table consequently lower, thus enabling a vadose stream to flow at this level and form the tubular passage. Later the valley was largely filled with Glacial drift, raising the water-table and forming the rectangular phreatic passage at the surface of the water table. As the stream is followed down the tubular passage disappears, the level of the rectangular passage being controlled by the surface of the water-table, which would be almost horizontal, so removing the lower levels of the vadose formed passage.

This passage was followed for several hundred feet, until a junction was reached. The obvious passage was a dry one, but we decided to follow the stream which we thought would lead to the Master-Cave. We were surprised to find though, that it sumped after another two hundred feet and so we returned to the junction. Here we found the Master-Cave, a short distance away up the dry passage. A large stream rushed down a clean-washed limestone passage here. about five feet high and six feet wide. Downstream looked very tempting, but we decided to go upstream first to have a look at the Rowten inlet. From here there were whoops of delight all the way. The stream soon split into two - we took the larger left hand passage. After a short crawl we came to a large deep-water passage. This consisted mainly of solution chambers, enlarged along cross joints, set at about seventy degrees to the direction of the passage. Between these the walls came down to about three feet from the floor, and one constantly had to duck under these. Most of the chambers are prettily decorated with flowstone and curtains, and are about twenty feet long (crosswise) fifteen feet wide and ten to fifteen feet high, being tent-shaped, the walls sloping inwards to the joint at the top. Several times neck-deep water is reached, and everyone enjoyed swimming up these Styx-type pools! In these pools there is a deeply etched level on the wall about three feet above the present water level. The limestone is eaten away to a depth of at least an inch, the junction being very sharp, so the water level must have been stable at this point for a long period of time.

After about one thousand feet we reached the Rowten sump, as indicated by the guide line passing into it. We could feel an air space with our feet, and dived through into another solution chamber. There is then an eight to ten foot tight dive into a large chamber, followed by a twenty-five foot dive into Rowten. However, we returned to the junction to follow the Master-Cave downstream.

From the junction the passage immediately increases in size. It is soon thirty feet high and twenty feet wide at roof level - the stream flows in a trench six to ten feet wide. Everybody shouted with excitement as we walked down. The floor is very pale and clean, the stream flowing quite rapidly, until all too soon it flows into the large terminal sump. The Master-Cave reminded me of Lost Johns after the first sump, where it is more active and the roof less high, though the Kingsdale Master-Cave is wider at roof level.

Just next to the sump a ladder which had been left there the previous day by some Club members hung down from the roof. This leads to an extensive dry roof series, over three thousand feet long. The passage is similar to South East passage in Gaping Gill although higher for most of the way. It appears to be an old inlet. On returning to the sump, we took the ladder down by tying a rope to the end and lowering it over a rock bridge. A ladder can easily be put up by throwing a rope over the rock bridge and pulling a ladder up by it.

We then made some pulses in the sump for Ken Ashton of the N.P.C. who had his instruments in Keld Head to measure pH, conductance and water level. He said the best way was to make a dam and then let it go, but we hadn't the time for this, so two of us dived into the sump at once. We did this four times at minute intervals before hurriedly heading back to the wet crawl.

Ken recorded these pulses on the graph of water-level in Keld Head between half and three quarters of a mile away from the final sump. He has kindly promised us a report of his conclusions about the type of passage between these points, made from a study of the time taken for the pulses to travel the distance and their relative magnitude. We hope to print this report if we receive it before we go to 'press' but analysis of the results is fairly complex, and may not be complete in time.

NOTE

On 3rd September, 1966 King Pot finally 'went'after seven or eight digging trips in the nearer of the new chambers. A 15" shaft was dug through boulders, and the head of a roomy 25' pitch reached. This was descended into a nice chamber, the stream being met here. The way on was through a small hole in a boulder choke and from here on the whole place is a mass of loose boulders. A short rift passage leads to the final 15ft pitch, which is very unstable. It ends – you've-guessed it! - in a mass of loose boulders, both on roof and floor. The extension is 69' deep and 75' long, the digging being carried out by Salford R.C.A.T. Cave and Pothole Club members as well as H.W.C.P.C.