The Proceedings of the

OXFORD UNIVERSITY

CAVE CLUB

Summer 1963

# THE PROCEEDINGS

#### OF THE

# OXFORD UNIVERSITY CAVE CLUB

No. 2. Summer 1963

## CONTENTS

EditorialPage	2
Caving in Spain 1962	5
A Short Guide to Bullpot of the Witches	11
Future for Potholing?	17
Tip Pot, Casterton Fell Area	26
A New Passage in Lancaster Hole	28
Dunald Mill Hole	30
"A Description of Dunald-Mill-Hole" by Mr. A.W. (1760)	35
Surveys Dunald Mill F	lole
Cueva del Vie	

Edited for the Oxford University Cave Club by Graham Stevens (Pembroke) and Michael J. Walker (University).

#### EDITORIAL

In editing the first number of these Proceedings, our predecessor had an easier task than us, since he was able to give a resume of all the work done by our club up to October last. Although legss than a year has passed since the publication of our first number, we intend to bring the "history" up to date.

In August 1962 several of our members again visited northern Spain.and more new discoveries were recorded. Our other meets during the year unfortunately have been hampered by transport difficulties, although several meets have been held nevertheless. In Michaelmas Term we ran two novices' meets to G-B. Rod's Pot. Goatchurch, Sidcot Swallet, and August Hole. A successful meet was held in Agen Allwedd.and we are grateful to the Hereford Caving Club for the use of their cottage. Christmas found us at the Manchester University Spelaeological Society's hut in Clapham. A warming-up session in Bar Pot resulted in loss of morale on the part of one member. but before withdrawing for her benefit, a trip across Pool Traverse was made. A slightly smaller party set out on the next expedition

to Nettle Pot, and after a little blasphemy found its real objective, Car Pot! Difficulties were encountered when even our very thinnest man (G.S.!) had to retreat from the Baptistry crawl with ignominy. However, the following day A-G succumbed to us, providing a most rewarding trip.

The snow in Hilary Term led to postponement of many meets. which were held eventually, nevertheless, in Lamb Leer and the Tawe Valley. Another Burrington meet enabled us to initiate into the underworld some keen lads from a Witney youth club. The Easter vacation saw a slight mishap in Bar Pot. One of our members who had been feeling groggy from an overdose of carbon monoxide poisoning gained whilst mending his car, fainted on his way up the entrance pitch. He was successfully brought to the surface by the party and our thanks are due to the Settle Police who provided a Land Rover to take him from the mouth of the pot itself to Skipton Hospital. Various members undertook trips with other clubs.notably Wessex and Craven.to Kingsdale. Juniper Gulf. and other holes.

The summer has seen us on Mendip. Dr Oliver Lloyd was just about rescued from Lamb Leer in a Practice Rescue. Other caves visited included Eastwater Swallet. A summer vac meet was enjoyed in the South Wales Caving Clubes hut at Penwyllt. Two days

were passed in Tunnel Cave, and other caves visited included Pant Mawr and Cwm Dwr Jama. The main meet of the summer, however, is to be the Oxford-Derbyshire Spelaeological Expedition to N.W.Spain, 1963. This is the result of the fusion of the Oxford University Cave Club Third Summer Expedition to the Picos de Europa and the Derbyshire Spelaeological Expedition to N.W.Spain, 1963. A report of the work achieved will appear in the next number of our Proceedings.

Our most notable talks of the year have been given by John Buxton of the Cave Diving Group, and by Reg Howard on the Gouffre Berger. Other talks have included northern Spain and the caving potential of upper Wharfedale and Littondale. The Annual Dinner. was greatly enjoyed, and Tim Cooke (Brasenose) was elected Chairman at the accompanying A.G.M..

During recent months a Council of Northern Caving Clubs has been set up to control access to Casterton and Leck Fells. The inadequacy of such a body is commented on in this number, see article "Future for Potholing?", in the light of the urgent need for a national potholing council.

G.S. M.J.W.

#### CAVING IN SPAIN

1962

August 1962 saw Oxford in the Picos de Europa for a second year running. In all, nine people spent up to three weeks at the mountain refuge of Lake Enol, and we are again grateful to the helpfulness of the Warden, Sr. Dn. Antonio Ramos, and his wife which made our stay so enjoyable. Four members had been present on the Oxford University Expedition of the previous year, but the general aim was a spelaeological holiday rather than the intensive expeditioning of 1961. Nonetheless, several new discoveries were made, and considerable extensions added to one major series. Some potholes were descended, but transport difficulties limited the amount of tackle available. However, some interesting deep holes were noted, which will doubtless attract our attention in future seasons.

Cueva del Viento (C.15), the long fissure cave reported in no, l of our Proceedings, was the scene of considerable activity (see survey at back of this number). One group set out to photograph formations and carry out further explorations. Some very winding and much-scalloped tubes were found running beneath the first part of the rift, but these were only explored for a short distance, and no general

direction could be ascertained. Further exploration of these is required. At the far end of the fissure passage it was observed that the water was at the same level as in the previous year, despite the wetter weather prevailing. A small tube was examined above the final resurgence through which a wind could be felt, and the sound of running water heard. This tube may well be capable of entry, perhaps after a little hammer and chisel work.

Possibly the most interesting exploration in C.15 was the discovery by a second party of Muddy Passage. This passage leads from the main chamber by a scalloped siphon passage. An alternative approach is from the development of the rift which crosses the entrance series near the prominent tufa wall noted in 1961. This approach shows the curious feature of two siphon tubes one above the other over a part of the distance, a feature which recurs in several parts of the cave. After the junction of these two initial passages, a series of dry mud-filled chambers is reached, linked by a complicated arrangement of scalloped tubes. These lead into a dry meander passage heading north-westwards and entering the long, dry rift of Muddy Passage. The general heading of Muddy Passage is roughly sixty degrees south of the direction of Muddy Passage. Formations were

noticed, but were generally rather muddy. As the passage began to become smaller, formations became more common. The passage ended with a low crawl penetrated by Tim Cooke, who reported a boulder-filled chamber with two possible exit passages. The part so far explored was surveyed to C.R.G. Grade Two, and consists of some 1,200 feet of passages. Many further possibilities await further exploration. Throughout Muddy Passage the penetrating draught blows as strongly as it does in the Main Rift Passage, hence the name, Cave of the Wind. Does Muddy Passage perhaps lead into an undiscovered Master Cave upstream of the end of the Main Rift Passage?

Another cave at high altitude showing promise is entered by a fissure overlooking the path leading up from the Refuge of the Vega Redonda, near to a curious shakehole whose floor is filled by a score of smaller shakeholes, giving it the appearance of an egg-container, and which may represent the bed of a glacial tarn. The rift itself leads in for about two hundred feet, containing a bank of snow for the first twenty feet. In places it is about one hundred feet high. Lack of adequate lighting prevented complete exploration at the extremity of the cave, where a boulder slope was found to rise toward the roof, until the two met, leaving only a low bedding-plane filled with boulders, through which a considerable

draught issued. Digging here may well be to advantage.

Several small caves were visited in the immediate vicinity of the refuge of Lake Enol. A very small cave was found with some delightful rimstone pools, in a dry valley forming a part of a sequence of sinks and risings plotted in that valley in 1961.

A small hole. Brown Mouse Hole. was noticed about threequarters of a mile down the road from Lake Enol. was laddered. and turned out to be a pot 55 feet deep. There was a flat boulder floor, and no draught, as was indicated by the very strong smell of a dead sheep! Several large shakeholes nearby were investigated and from some of them strong draughts emerged. These offer likely prospects, but involve removal of boulders and slight digging. Somewhat nearer the lake a rift to the south of the road opens prominently in an outcrop. The rift was climbed down for about twenty feet, but there was little horizontal development. A window half-way down led into a small chamber with calcite concretions, and in which one member of the party reported seeing a snake several feet long. Investigations by other members failed to substantiate this, but a further look by its original observer revealed it

again. It is curious that the snake was present only when there were no other witnesses, and that other visitors observed several blackened, dead branches in the cave....

A cave in an advanced state of development was uncovered during a mist-enforced halt in the Vega las Mantegas, with good formations, all covered in a thick layer of bergmilch. A remarkable covering of calcite in different coloured layers could be chipped away from the roof and walls.

At high altitude near the Fuente Prieta, at rather less than 6,000 feet above sea-level, several caves full of snow were looked at, and some had two or more entrances. None appeared to be of any size, although in some draughts were felt, and there is always a strong possibility that extensive series may have their entrances blocked by snow.

Shakeholes in the vicinity of Lake Enol often appear to need digging. One promising dig was begun which may offer an alternative entrance into Pozu Palomeru (P.1) to the present 160 foot entrance shaft. However, two of the more notable discoveries of the season were made in this region in shakeholes requiring no digging. One was a pothole descended among boulders into a dry chamber, in the floor of which two holes led to a pitch of at least fifty feet.

Lack of ladder impeded further progress. Another hole gave a pitch

which took a stone eleven seconds to fall down, although it bounced en route. A clear pitch of perhaps five hundred feet is believed to exist. It is hoped to ladder this as soon as possible. Both holes are quite close to the road just after it leaves Lake Enol, and passes through a shallow valley. Is it perhaps possible that the potholes represent a glacial overflow system from the lake?

Three serious attempts were made to reach the summit of Pena Santa María de Enol, a limestone knife-edge of a peak rising to about 8,050 feet above sea-level, the second highest peak in the western massif of the Picos. Attempts were made from the south and also the northern snow-slope. One party attained a position a mere 60 feet from the summit, but had to retreat owing to the danger from the looseness of the rock, which demands exceptional caution.

A party also descended the canyon of the River Cares, a gorge over a mile deep, to the village of Caín, which is found in the Shangri-La of the Valdeon, a hidden valley whose only exit is through the canyon. The return to the refuge was made through the night via an ascent to the foot of Peña Santa María de Castilla. The twenty-three hour journey involved

ascents and descents totalling some twelve thousand feet.

There is immense scope for further cave exploration in the Picos, both in partially explored as well as in unexplored systems. Between 2,500 to 4,000 feet above sea-level, the best possibilities appear to be in shakeholes, even if digging is required. Above that zone the main obstacles are inaccessibility and the difficulty of supplying a camp in so remote an area. The last difficulty may be relieved by the new refuges at present being built by the Spanish authorities to promote tourism in the area.

K.J.Mills M.J.Walker

#### A SHORT GUIDE TO BULLPOT OF THE WITCHES

The open pot is situated in a large shakehole, south of Bullpot Farm, Casterton. It can be descended without tackle by a traverse on grass to a tree on the west side, whence a 40 foot handline is helpful for another downward traverse to a cave entrance at the south-west end. Along this passage, and down a chimney, and one emerges in the South-East Passage. Leftwards leads to the

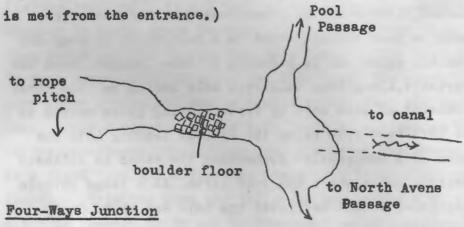
bottom of the open pot, whilst right, through a low crawl, leads to the Main Chamber ('32 Cavern). Two other routes lead from the open pot. To the north, a climb into a passage above the water sink, and then down a hole on the left, leads to a 35 foot pitch (ladder required). At the foot of the ladder is Flood Fall Chamber in North Avens Passage. To the south-west from the open pot.a descent through boulders leads to the head of a 60 foot ropenpitch (belay to the iron bar). The pitch is in many short stages and can be free-climbed. Near the bottom of these drops, a passage on the left leads to a climb up boulders to the Crossroads. Continuing down the drops, the stream is met at a right turn, and a traverse leads to a ledge at Four-Ways Junction. Climbing down and following the stream, a 25 foot pitch is reached, which can be descended using a ladder (20 foot belay in roof), or a rope (40 feet, same belay), or freeclimbing depending on the volume of water flowing. In all cases, traverse out and down. Below is a chamber and another pitch into a chamber. This latter pitch is avoided by a traverse high on the right wall, leading to the far side of

the chamber, whence an easier descent is possible. From here the stream flows into the canal.

Just before this, an eyehole on the right leads to a gallery, Long Gallery, above the canal. To the right, along Long Gallery, a stream is reached, flowing south. Downstream the roof meets the water. Upstream is over shingle banks to a pool, which in very dry weather has an air space and is passable to Lake Chamber. From the left, at the eyehole, along Long Gallery, a hole Mading to the canal is reached. Descent of this hole by free-climbing gives access to two holes, the left-hand hole being the easiest leading into the canal. Upstream is a sump; whilst downstream the water is followed apart from shingle banks, until the roof lifts. At a large pothole take the upper level to the left, over the hole and on to Cairn Chamber and a crossroads.

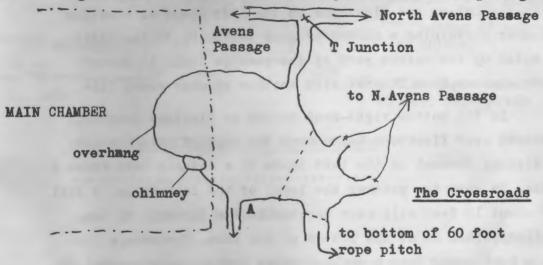
The right-hand passage leads over a pool to some low, crawly ox-hows. The left-hand passage chokes to the left; but to the right a dry stream passage runs parallel to the stream passage (which continues straight on at the junction, whence water is soon met). The stream passage and the dry passage both end in the final sump chamber. The stream passage contains a duck, and there is one connection between the routes. Back in Long Gallery, continuing

past the hole in the floor, the passage drops to a low, choked crawl at a junction. Here a climb on the left up an aven leads into Pool Passage, which, after a squeeze at a pool, comes out at Four-Ways Junction. (This is the passage on the left as the junction



In the Main Chamber, a hole on the right can be descended, or use can be made of the easier chimney on the nearside of this. At the bottom is the Crossroads, where many ways meet, see diag. p.15. Passage A, high in the right wall, leads to the roof of one of the chambers in the South-West Entrance Passage (i.e. the one containing the 60 foot rope pitch). The next passage on the right is a climb down boulders to the bottom of the rope

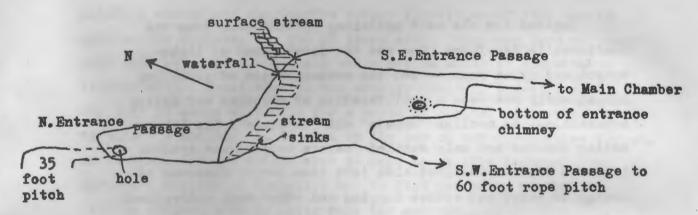
pitch in the South-West Entrance Passage. The third and fourth passages lead to North Avens Passage. The latter emerges in a small chamber to the side of this passage, and also containing a passage to the right. This connects with Four-Ways Junction. The passage



on the left at the Crossroads leads to T-Junction. To the left, the passage, Avens Passage, leads to two large avens. To the right, North Avens Passage leads past two junctions to a large chamber containing an antechamber, Flood-Fall Chamber, where the North Entrance Passage descends.

Onwards, along North Avens Passage, the passage ends at a flowstone slope, but two holes on the right drop down into Flowstone Rift. After proceeding along this for about 15 feet, a long climb up the flowstone on the left leads to Rimstone Chamber, containing a number of gour pools. Up to the right, a climb up the narrow part of the passage leads to second gour chamber, Moon Chamber, with another chamber above this.

In the bottom right-hand corner of Rimstone Chamber, a descent over flowstone leads into the roof of Lake Chamber. A sloping descent on the left leads to a shingle bank above a lake. In very dry weather the level of the lake falls. A fall of about 15 feet will make negotiable the passage to Long Gallery, which is at the bottom of the lake. Upstream, a duck in a pool opens into a small chamber with an ox-bow crawl to a large stream passage. On the left, a small hole gives access to a large shattered aven. Onwards, the passage ends at a sump. Returning, there is a gallery on the left, which returns downstream in the roof of the main passage. The passage is known as '49 Cavern after the year of its discovery.



The Open Pot, Bullpot of the Witches.

#### FUTURE FOR POTHOLING?

The Golden Age of Potholing is not likely to return, at least to England and Wales. Before the war there were few cave clubs and many pots in the Pennines still offered new ground to be broken. The Golden Age which had been ushered in with the boom and pulley methods of the Yorkshire Ramblers and other early potholers, probably ended with the sophisticated rope ladders which Gemmell and Myers couldcoarry easily (!) on their bicycles. But even Gemmell and Myers had to look in rather out-of-the-way corners for some of their discoveries, for holes were getting scarcer and scarcer.

Impetus for the next potholing advance came from the Continent in two forms. One was the development of light-tackic weight/and nylon rope — and the mechanisation of potholing subsequently has seen a proliferation of maypoles and diving apparati, not to mention "uppets" and "skyhooks". The labour-saving devices not only enabled cavers to push new systems hitherto inaccessible, but also left them larger reserves of energy to carry out active digging and other work underground, and more space in their rucsacks for better survey equipment and other spelaeological apparatus.

The second form taken by foreign influences was to persuade clubs to explore areas abroad, previously little examined.

Ireland proved, and still proves, popular since it was found there were still holes for the laddering. However, university groups with their close-kmit internal organisation and copious free time (!) have often undertaken some of the more exotic expeditions — to Norway, France, Yugoslavia, Austria, Libya, and last but not least, our own Oxford University Expedition to Northern Spain, the first British expedition abroad whose sole aim was cave exploration to receive official support from both the University and the Cave Research Group, among other bodies.

Other clubs and individuals have recently run fortnightly caving

holidays abroad, and the Gouffre Berger Expedition of 1962 was an outstanding success. But few of these short trips can hope to break into much new ground, and their value may be small if there is no link-up with a local club in the country visited. Indeed, I might say that it seems as futile for a north of England club with a fortnight's holiday to do much in the way of new discoveries abroad, as it would for our Oxford club to hope to be able to spend time seriously digging in Yorkshire and to find something worthwhile. Time is against both in their race for success.

The 'fifties saw a group of cavers faced with so many tough English systems to be bottomed, that many potholers were more anxious to prove their physical fitness by rushing up and down "supersevere" pots, with the same lack of interest in anything but doing "the sights" that the average American tourist in Britain shows.

Exploration tended to become concentrated in the hands of small bands of tigers, who often waged fierce war against rival cliques. Their perseverance was often rewarded by discoveries nevertheless. Spelaeological information was collected and centralised by the C.R.G., and many clubs were glad to abdicate from responsibility towards doing any scientific work whatsoever. They are mistaken, for the C.R.G. needs their active participation. Scientific

methods are needed to help locate the ever-dwindling number of unexplored systems — water-testing, geoelectrics surveys, cave surveys to Grade Six or Seven, and careful field-work on the surface. Today it is only the "never-ending" series such as Lancaster Hole or Agen Allwedd that offer obvious chances for new passages of any length, and then only after laborious digging, blasting, or erection of scaling poles. Cave diving and mine exploration are also coming to the fore.

A serious development during the 'fifties was the appearance of many small caving clubs like our own. The post-war upsurge of interest in hiking, mountaineering, and the like, hit potholing too. The spread of further education saw the establishment of many university, technical college, Services', and even school potholing societies. Some are well-equipped and can draw on experienced cavers from all over the country, especially in the universities. Students also offer the best chance of bringing back to clubs an interest in scientific matters, especially when geographers and geologists of the university staff are interested in the clubs. Regrettably,

some small clubs are ill-organised and have leadership problems. These, together with potholers who refuse to join any sort of club, lead to trouble and irresponsibility. Damage is done to property and land, permission to enter a system may not be sought, all too often tackle may fail, or the difficulties of a system may be underestimated. Farmers are naturally annoyed when two hundred "rescuers" turn up to hold a gala, and public relations totter, and collapse completely when the Press gets the "scoop" of an accident.

It is the irresponsibility of the few which has led to the restrictions placed on many caves.either by the landowners.or by clubs or groups of clubs. The reasons for restrictions tend to be various. To allow only one party at a time down systems such as Gaping Ghyll or Lancaster-Easegill may prevent tackle mix-ups.and also limits the number of people wandering about the fells. The newly formed Council of Northern Caving Clubs seems largely to have been formed to maintain a sort of discipline over access to and entry of caves on Casterton and Leck Fells. In the case of Agen Allwedd and August Hole-Longwood Swallettthe landowners seem mainly interested in legal questions respecting their liability towards any potholers injured underground. The Indemnity Chits signed for the Nature Conservancy to enter Aggi are of dubious validity.

On safer ground, Bristol Waterworks now require clubs to acquire expensive insurance before entry to caves on their land. In other cases farmers may charge varying fees, but to my knowledge none have ever been held responsible for injury sustained by a potholer.

Some other caves are kept perpetually closed as the result of dud schemes to exploit natural ouriosities, e.g. Dan Yr Ogof, Tunnel Cave. Some show caves may be explored in the further reaches, e.g. Clapham Cave, Stump Cross Caverns, varying fees being charged for entry. Where work is being carried out of a serious nature, or where formations are particularly fine, certain clubs have obtained sole access rights to particular caves, e.g. G-B, St. Cuthbert's Swallet, Ogof Ffynnon Ddu.

The trouble with all these restrictions is that in the long run they are imposed by the landowners. The Council of Northern Caving Clubs is a case in point. Its very raison d'être was that of mediation between landowners and potholers for permission to use the land and enter the caves. Further, it must contain some of those selfsame small clubs whose irresponsibility has often been nationally publicised. How

is it to deal with unruly members? If they are witheld permits, they will go in illegally, if necessary dynamiting any barriers to entry, as has happened in the past. If the illegal entrants suffer injury, are the landowners responsible in spite of the trespass suffered? If they are not members of clubs belonging to the Council, how are they to be dealt with?

I believe it is high time all clubs from all over the country got together, perhaps under the auspices of the C.R.G. or B.S.A. to form a national potholing council, representing all potholers. Such a council would have a national committee drawn from all the major caving areas, and containing "prestige" figures of the calibre of, say, Sir John Hunt. It would receive a subscription from all member clubs, like the British Mountaineering Council does for climbers, say four or five pounds a year. The C.R.G. and rescue organisations could operate in conjunction with a council so constituted, and if necessary be subsidised by it. The council would have the following tasks:

- 1. to ensure good public relations with press and television
- Recreation and local education authorities' youth sports' officers, and other youth movements, so as to stop discorganised mobs getting into trouble. Many youth leaders will not envisage potholing as an organised activity on account of its bad name; and many clubs will not instruct lads who want to learn unless they undertake to join.

  Can we not liaise and help to make potholing as respectable as climbing? Liaison with the Duke of Edinburgh's Award Scheme, Scouts, or Outward Bound would be possibilities.
- 3. to ensure arrangements for insurance of members clubs, so as to avoid the present necessity of making separate arrangements for each cave and landowner. This should include a scheme to recompense landowners whose property is damaged as well as removing from them any liability in respect of injuries sustained by potholers.
- 4. to schedule all major caves as Sites of Scientific Importance and if necessary to take out Court Orders so as to be able to prosecute trespassers through the police.

- 5. to abolish all restrictions to caves to members of member clubs where deemed fit, disciplinary action being taken against nuisance by withdrawal of insurance benefits or by prosecution.
- 6. to publish a glossy prestige journal of British potholing. similar to "Mountaincraft".
- 7. to sponsor foreigh expeditions and aid their publicity, possibly enabling really big expeditions to explore the unthought-of caves of the Himalyas or the Andes.

This may all sound rather high-flown and complicated. It is really long overdue simplification. To get potholing a good public image we must forget our cliques and rivalries, our petty self-interest and short-sighted policies and unite so that English potholers can stand alongside English mountaineers and count equally great successes.

M.J. Walker

# TIP POT (Casterton Fell Area.)

This is a description of a previously unreported small addition to the Casterton Fell underworld. The name is obvious, since the shakehole in which it is situated, and the adjoining one, are used as the rubbish tip for Bullpot Farm. For this reason, and the presence of a dead sheep in the shakehole, it has been little visited. However, thanks to the efforts of the Earby Pothole Club, two entrances were forced, but only the lower one is now open.

The shakeholes are just over the north wall of the green lane from Bullpot to Barbon, about a hundred yards from the metalled road to Bullpot. The open entrance is at the bottom of the most easterly shakehole of the two, and consists of a small chimney into a low chamber. This part of the pot is particularly loose and shattered, the Dent Fault running nearby. The chamber contains loose boulders, rusty tin cans, and various sheep bones. From here the whole cave is on a skew to the vertical. A sloping descent to the left leads to a small chamber. Here a belay is found (50 foot belay)

and a 25 foot ladder is threaded through the crawl to the left. The pitch is very awkward, and once the ladder is in place, it is easiers to approach it feet first. At the bottomcof the pitch, a climb over boulders leads to the lowest point of the chamber, whence a low crawl doubles back at the low level, until a corner is reached. This is a muddy duck in a pool, and leads to a small chamber at the start of a very narrow parallel rift passage. The passage is only negotiable for about 12 feet further, although water can be heard ahead. A hammer and chisel may make a way possible, but chemical persuasion may have a ruinous effect on the upper reaches.

This final passage is heading towards Bullpot of the Witches, and it is very likely that it will soon reach this. The vertical depth at this point is about 100 feet. With regard to the point of emergence in Bullpot, an aven descends to the west of the passage in '49 Cavern to the north of Lake Chamber. Signs of a passage are visible above.

The heading of the rift in which all the passages lie at various levels, is the same as the predominant one in the northern reaches of Bullpot, namely, parts of N. Avens Passage, Flowstone Rift, and Lake Chamber. It seems obvious that they should all be attributed to development along the Dent Fault, which runs in the same direction.

Standard: V. Diff. Pot. Well worth the short time needed to explore it and have a go at the final squeeze. G. Stevens.

#### A NEW PASSAGE IN LANCASTER HOLE

This passage leads from the Main Drain, near the bottom of the Rathole descent from Fall Pot. The entrance, which was blocked with boulders, was dug out by members of the potholing section of the Fylde Mountaineering Club. It was first explored on July 3rd, 1960, as far as the second portcullis. The next, and complete, exploration was made eighteen months later by S.B. Barnes of Cambridge University Caving Club and myself, both being members of F.M.C., on December 16th, 1961.

The passage is significant in being an inlet on the south side of the Main Drain, whereas other inlets are on the north side, e.g. Wilf Taylor's Passage and Waterfall Passage. The entrance is between boulders, high above the stream in the Main Drain, about 15 feet upstream of the normal exit from the Rathole. A tight squeeze through a slot leads into the wall of a stream passage, above a drop. Downstream is choked; but upstream, near the roof, a traverse among good formations on silt covered

ledges leads to where a descent to the stream is possible. Soon a portcullis is reached, being a low crawl in water beneath formations. Next, a very tight, awkward, ascending snake to the left, leads to a continuation. The roof lowers, and the water deepens. Two rather wet portcullises lead to a flowstone choke in a small chamber. Further progress will have to be at the expense of this flowstone.

The volume of water in the passage is not insignificant, and the silt on the ledges suggests flooding, which probably occurs when the Master Cave "backs up", (c.p. flood débris in Rathole itself). The passage contains some very fine formations, but they are often sullied by the silt. There are two roof galleries, one rejoining the stream passage, the other containing gours. The length of the passage is four or five hundred feet, and the general heading is south—east. Standard suggested: V.Difficult.

G. Stevens

#### DUNALD MILL HOLE

(Nether Kellet, Carnforth Lancs. N.G.R. SD 515676.)

This small cave, which is marked on the O.S. 1" map number 89, is situated in a large depression housing the remains of a corn-mill. A large entrance forms an escarpment at the west end. The cave has been known for many years. One of the earliest descriptions, found as an addendum to West (1) taken from the Ahnual Register for 1760 was brought to my notice by M.J.Walker and is reprinted in this journal. John Housman (2) in 1800 gives an accurate description of the streamway. A full reprint of this is given by Platten (3),1952. Another report on the cave is given by Ruthven (4) im Platten's paper. An earlier report by "Northerner" (5),1942, gives a fairly complete description of the cave, including the left-hand series.

The rest of this article is a brief description to supplement the survey. Three passages lead off from the large entrance. The large stream flows down and into the right-hand side of the arch, and along the Streamway. A large boulder dominates the centre of the archway, and the centre passage leads off from a

ledge, behind, but slightly above, the boulder. The left-hand series starts as a low crawl at the left-hand corner of the archway, and is the first passage on descending the soil slope to the entrance.

The Streamway is the most obvious passage: it immediately opens out into a large chamber, which doubles back to the right to the Back Door entrance. Downstream, the width falls to 3-4 feet, and there are some formations on the right wall here. The stream descends a number of cascades to two sharp bends, and a short fall into a chamber with a fairly deep pool. Onwards are more cascades, and soon another chamber is reached. The roof here is over 20 feet high. A partition here splits the stream. . which soon reunites to flow under a low arch. In 1960 I remember finding and exploring an ascending sandy tube which choked starting in the right-hand corner of the chamber. This was not seen during the recent survey programme, so I have only indicated its rough location on the plan. Beyond the low archway is a small chamber with some good flowstone and a Beehive Boss. The stream passes under another low arch to the terminal chamber, and sinks here to the left. A narrow passage continues on but this has always been full of foam. Flooding seems to occur to a good height in all this passage. A recent rumour

has it that a final syphon has been passed by members of the Red Rose Pothole Club, but a report has not yet been seen.

The centre passage commences at a ledge of jammed pebbles. and leads to a squeeze past formations in a narrow rift passage blocked with curtains in places, giving rise to squeezes. The passage widens slightly at the end, and in the roof here are the roots of broken stalactites that must have been at least four inches in diameter. Ten feet back from the end of this passage is a small nest of cave pearls some two inches in diameter. I have some doubts as to the authenticity of the nest, since two pearls appear to be missing. Also similar looking pebbles can be seen at the entrance, and surely the nest would have been robbed by now? The best evidence for the genuine nature of the nest is the cleanliness.compared with the surrounding rock, but the nest is dry. It contained (April 21st, 1963) four pearls, which "fitted" together.

The left-hand series starts as a low crawl to a drop into a chamber. Up the passage, a low passage can be pushed for twelve feet, before withdrawing. Down the passage, a low, tight route with varying amounts of flows tone leads down with a few short drops to the "sink". Here the way is up to the right. At this point the roar of a considerable volume of waterccan be heard, but no such amounts are known to flow nearby. The sink is not a good dig, being much too narrow. Onwards, the sandy floor gives way to a stream passage, and an eighteen foot pitch is reached. This is an easy climb to the floor of a chamber. A stream, much smaller than the one heard, crosses the chamber from the left to the right, sinking in a pebble-filled passage, which would provide a laborious and probably unrewarding dig.

Ruthven (4) mentions the finding of a chamber with calcite gours and gypsum flowers by the use of hammer and chisel, (see Cullingford (6),1962), but I find no trace of this. Further work lies in systematic water-tracing, and the "discovery" of other known caves in the area, inadequately described in Pennine Underground. A nearby quarry is rapidly encreaching on the edge of the cave, so a "through trip" may soon be possible.

The survey is claimed as Grade Three. A great deal of care

was taken over the readings, over 200 measurements being made for a cave of less than 600 feet, but the grade is dictated on account of the inaccuracies of the instruments. Slopes were measured and corrected for in the plan.

G.STevens.

### References:

- (1) West, A. "A Guide to the Lakes in Cumberland, Westmorland, and Lancashire" Addenda: Article V—"A Description of Dunald-Mill-Hole", 26th August 1760 (London 1793)
- (2) Housman, J. "A Topographical Description of Cumberland,
  Westmorland, and Parts of the West Riding of
  Yorkshire" (1800)
- (3)Platten, G. The British Caver XXIII (1952)
- (4) Ruthven Reports ditto XXIII (1952)
- (5)"Northerner" ditto IX (1942)
- (6) Cullingford ed. "British Caving" p. 179 (2nd. edition, 1962)

"A DESCRIPTION OF DUNALD-MILL-HOLE" by Mr. A.W.

Taken from the Annual Register for 1760. Published as an Addendum,

Article V to "A Guide to the Lakes in Cumberland, Westmorland, and

Lancashire" by A.West (London 1793).

Lancaster, August 26,1760.

"Last Sunday I visited a cavern about five miles from hence. near the road to Kirby-Lonsdale, called Dunald-mill-hole, a curiosity, I think, inferior to none of the kind in Derbyshire, which I have also seen. It is on the middle of a large common, and we are led to it by a brook, near as big as the new river, which after turning a corn-mill. just at the entrance of the cave, runs in at its mouth by several beautiful cascades, continuing its course two miles under a large mountain, and at last making its appearance again near Carnforth, a village in the road to Kendal. The entrance of this subterraneous channel has something most pleasingly horrible in it. From the mill at the top. you descend for about ten yards perpendicular, by means of chinks in the rocks, and shrubs of trees; the road is then almost parallel to the horizon, leading to the right, a little

winding till you have some hundreds of yards thick of rocks and minerals above you. In this manner we proceeded, sometimes through vaults so capacious, we could not see either roof or sides; and sometimes on all four from its narrowness, tall following the brook, which entertained us with a sort of harmony well suiting the place; for the different height of its falls were as so many keys of music, which all being conveyed to us by the amazing echo.greatly added to the majestic horror which surrounded us. In our return we were more particular in our observations. The beautiful lakes (formed by the brook in the hollow part of the cavern) realize the fabulous Styx; and the murmuring falls from one rock to another broke the rays of our candles, so as to form the most romantic vibrations and appearances upon the variegated roof. The sides too are not less remarkable for fine colouring; the damp, the creeping vegetables, and the seams in the marble and limestone part of the rock, makes as many tints as are seen in the rainbow, and are covered with a perpetual varnish from the just weeping springs that trickle from therroof. The curious in grottos, cascades.&c. might here obtain a just taste of nature. When

we arrived at the mouth, and once more hailed all-chearing daylight, I could not but admire the uncouth manner in which nature has thrown together those huge rocks, which compose the arch over the entrance, but asif unconscious of its rudeness, she has clothed it with trees and shrubs of the most various and beautiful verdure, which bend downwards, and with their leaves cover all the rugged parts of the rock.

"As I never met with an account of this place in any other author, I therefore think it the greater curiosity; but its obscure situation I take to be the reason."

