

**L.U.C.C.
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EDITORIAL

Here at last is Number 9, after several weeks of pestering potential authors. In it there is the usual mixture of technical articles (Chalk Caves), accounts of trips in Britain (Washfold and Pen-y-Ghent) and expeditions abroad - the long awaited I.C.C.C. 1968 visit to Grenoble.

This is the last Journal that I will be responsible for editing and producing. The next editor has yet to be appointed, but all the same I wish him the very best of luck with the next issue, which I suspect will not appear until October unless there is a sudden influx of articles.

Finally I would like to thank several people who have been of considerable help in the past year: Tony Waltham and Jim Winterhalder for writing a large proportion of the articles (even if the latter does take six months to produce one!), Jon Hallam for production assistance, and Diane Norvick for top quality typing.

Mike J.Gibson (I.C.C.C.)

Copies of this Journal, from Number 5 onwards, are still obtainable from the Editor, c/o R.C.Lethbridge, Zoology Dept., Imperial College, Prince Consort Road, London, S.W.7., price 2/- for No.5, 2/6 for Nos. 6-9, including postage. The subscription rate is 9/- per four editions.

PLEASE WATCH FOR AN ADDRESS CHANGE IN THE NEXT EDITION.

SWALLETS AND CAVES IN THE CHALK

The Chalk is the most widespread limestone occurring in Britain, forming the Chiltern Hills, the Downs and Salisbury Plain, also the Wolds of further north, and for the most part being about 700 ft. thick. However, none of these regions contains any known caves although they do exhibit many of the classical karst features, such as dry valleys, sinkholes, springs, blind valleys and complex underground drainage systems. This general lack of caves is due to the nature of the Chalk itself, because, unlike the Carboniferous Limestone, chalk has a certain primary porosity so that water can filter through it by way of intergranular pores and microfractures. Consequently, the underground drainage is not entirely restricted to cave-sized streamways, though a significant proportion of the flow is by way of such larger fissures, some of which may be of explorable size.

Genuine cave systems do exist in the Chalk of northern France (see below), and although there are none known in England there are some promising indications. Many of the smaller streams crossing the Chalk in south-eastern England lose their entire flow underground in dry weather. These intermittent streams are generally known as bournes and famous examples can be seen at Croydon and Berkhamsted where the streams sink and rise a number of times down their course. Furthermore, when a period of heavy rain follows a relative drought some dry risings may become very active in a short time, and it has been observed that immediately before the main volume of flood water resurges some of the risings emit a very strong wind. This appears to represent the expulsion of air from a quite considerable volume of underground cavities, and the rapid flow suggests that at least some of these must be reasonably large and well integrated. Another sinking stream is the River Mole which flows across the Chalk north of Dorking and during low water part of the stream disappears down a number of conical swallow-holes in its bed. In the winter of 1947 one of these sinks ran in to reveal a 40 ft. deep shaft known as Policeman's Hole, since infilled.

Remnants of old solution cavities can be seen in a number of chalk quarries around London but they are mostly just pipes up to 40 ft. long, nearly vertical and a few feet in diameter. They were formed during Tertiary times, so are now filled with clay, and were merely phreatic enlargements of joint intersections, only joined to each other by much smaller fissures. Finally it should be noted that the Chislehurst Caves and the various Deneholes of South Essex are entirely man-made.

Mymmshall Swallets

It is perhaps somewhat surprising that the largest enclosed karstic drainage basin in England is not in the classic caving areas but in outer London. Mymmshall Brook has a catchment area just west of Potters Bar of 17.9 sq.miles (compared to Goyden Pot with 12.6 sq.m., and Gaping Gill with 1.1 sq.m.) and the entire stream normally sinks

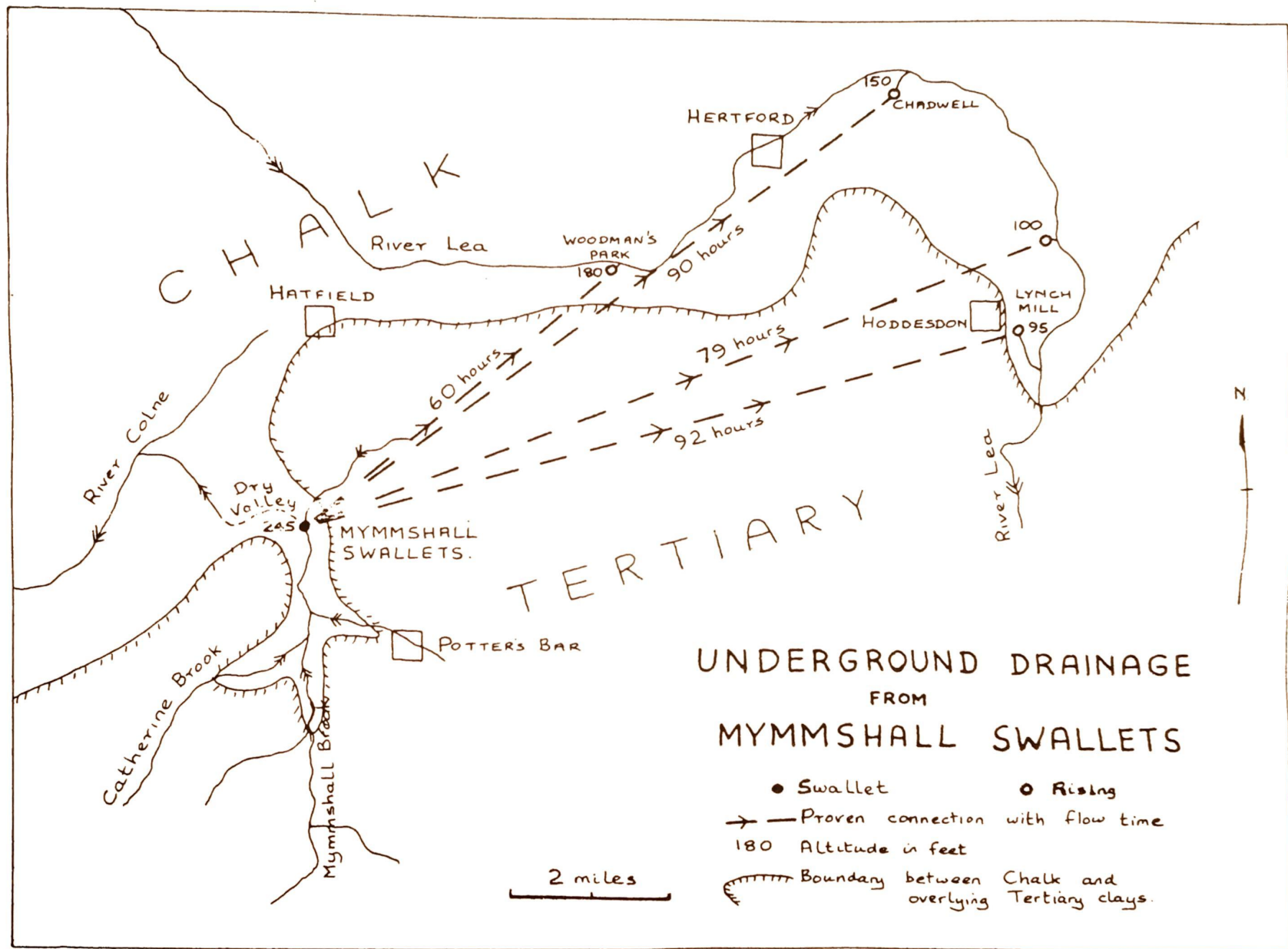
at Mymmshall Swallets (N.G.R. - TL.232044).

The water collects on the Tertiary clays and flows northwards to where the valley has been cut down into the Chalk. Here the Chalk is presumably relatively free of fissures for the stream flows over it for about two miles in a valley now partly filled with sandy alluvium. But at Waterend the entire stream normally sinks in the Mymmshall Swallets. There are three major sinks and about 15 minor ones spread over an area of about five acres. The principle sink which takes most of the water in normal weather is at the end of a classic blind valley cut 20 ft. deep in the alluvium - a most inspiring sight to a cave hunter. This has been seen to easily engulf a flow of about 1.5 cusecs (similar to an average wet Swildons) when the water can be heard flowing away underground. The passage is extremely small however and often choked with rubbish, but digging in the past has permitted entry for a few yards, the stream then flowing away enticingly in an impossible small cave. In winter the stream may swell to about 150 cusecs, which cannot pass down the swallets, and hence a lake may develop a few hundred yards across and up to 30 ft. deep which then overflows down a normally dry valley to the west. This valley was the original course of Mymmshall Brook.

Some years ago dye was introduced into the swallets and the results are shown on the accompanying sketch map. The underground courses therefore range between $5\frac{1}{2}$ and $10\frac{1}{2}$ miles in length with a drop of 65-145 ft. The fact that the one group of swallets (with most of the water and dye going down one sinkhole) feeds four widely spaced risings, suggests that the water is passing through a saturated zone of rock with complex multidirectional flow in microfissures and a maze of larger fissures. In other words a discrete cave system is unlikely to exist for the entire underground course. On the other hand the rapid flow-through times (see map) suggests that there is significantly large passage permitting rapid, easy, vadose flow for at least some of the route - probably the initial stages, and it is this possibility which appears to present the best chance of discovering a significant chalk cave in England. However, we cannot necessarily assume to find a vadose passage leading down, for 65 ft. in depth to a rest level at the height of Woolmer's Park resurgence; the system of microfractures which the water must pass through for some of its course could impose a considerable hydraulic drag on the flow and thus result in a distinctly inclined water-table. In this case the passages may be waterlogged at very little depth below Mymmshall Swallets.

Chalk Caves in France

Perhaps we may take heart from the fact that France boasts a number of caves in the Chalk, some of quite reasonable size. Two of the largest are found near Rheims; one is 2000 m. long with an active streamway and an abandoned high level system while a second



is 1500 m. long and contains a variety of formations. Furthermore, some caves near Rouen contain such features as 50 ft. pitches and presentable chambers, entered via numerous crawls.

A.C.Waltham (I.C.C.C.)

WASHFOLD POT.

The following article, found amongst the memoirs of A.C.Waltham, Ph.D., in the archives of I.C.C.C., is a saga from the early days of the club, when enthusiasm and insanity ran hand in hand throughout this now celibated body of pot-holers. Now read on:-

Many moons ago the hard core and the soft centre of the great Imperial Caving Club lazed in the snack bar and discussed in wonderment the terrors of thathole on Ingleborough known as Washfold. They heard stories about the hero Carney who had thrust a number of beginners down "The Pitch"(so that he could step off onto a pile of bodies and save himself some ladder climbing!) Then the equipment officer became voluble as he did not want his ladders "cut down and left" on the last pitches - how fierce was this hole? Consequently, it was decided to launch a massive expedition and so one fine Saturday a keen early start (about 4.0 p.m.) was made and two club members (Julian Hardenberg and Tony Waltham - poor fools) staggered up the fell.

The entrance was easily found as the leading explorer practically fell down it. The drop led straight into a small streamway of awkward size but which would have been easy without a half share of 350 ft. of rope and nine ladders etc.. But a very short distance on the stream disappeared (laughing quietly) into a minute crack and there in the roof was the dreaded bedding plane. A brief halt was made and anti-gravity pills were consumed by all expedition members, who then glided up the rift into the roof crawl. The tackle followed - but thats another story. Then great joy - a chamber - but sudden despair followed when the passage beyond was seen to be one of the floorless variety. But with back and knees being worn to the bone this was quickly traversed and soon the explorers, looking down between their feet, saw a big, black hole - "The Pitch". The traverse continued and then widened out impossibly, and just beyond this point were two rawlbolts. (We are still looking for the lunatic with legs 125 feet long who drilled the holes). Ladders and lines were attached to the bolts, but then the intrepid pair lost confidence in the lifeline bolt and the spare rope was used to attach it safely to a beam, a large flake and everything else in sight. Truly, the pitch was a fine one, 130 ft. long and all but six inches being free down the centre of a perfect round shaft with the water crashing down one side.

From here the passage was a rift so narrow that it first involved crawling in a shale band but it soon opened out and permitted a rapid descent. Waving the I.C. flag the explorers swung like chimpanzees down the rifts and like demented maniacs hurled themselves down huge piles of chockstones. Then a genuine streamway was entered, all of 15 ft. long - leading to a ludicrously wet pitch. The bottom of this pitch was completely hidden by spray, and of course the lifeline was now decorating the top of the big pitch. But ingenuity won the day, a ladder was rigged and one Imperial body sat neck deep in the stream lifelining (with the other ladder) the second Imperial body who descended Half-way down was a spray covered ledge where a little bit of re-rigging permitted the remainder of the descent to be made in reasonable comfort. 35 ft. down the floor was reached and crossing a small chamber, another shorter pitch was found with the gloomy sump visible at the bottom. But here the lack of tackle and the C.R.O. safety code permitted an honourable retreat (mild cheers all round).

So, two hours later, after endless thrutching with tackle, some surprisingly easy climbs and "The Pitch", two weary bodies hauled themselves onto the Ingleborough Moors to be stared at by a flock of idiot sheep. But for once the sheep were better off, even they had the sense not to go down Washfold!

A.C.Waltham, (I.C.C.C.)

THE I.C.C.C. EXPEDITION TO FRANCE - 1968.

A general account of the trip of "Caving Olympics in Grenoble - 1968!"

On Sunday, 23rd. June, 1968, the final stages in the conversion of our then new, shiny Ford Transit, into a high-class travelling doss-house, were in progress. Allowing for at least an hour to pack the kit the following day.

Aiming to get the 2.0 p.m. Ferry from Dover, we set out in good time, having leisurely stopped on the way to change a tyre which decided it could not face the impending journey.

The Hon. Treasurer's motor bike blew up in Dover and was abandoned on the spot, and we were on the ferry with at least one minute to spare, being the last vehicle on.

Once in France, we drove almost non-stop to Geneva, arriving at the respectable hour of 10.0 a.m. to mingle un-noticed (almost) with the wealthy tourists.

Continuing our merry way to St.Pierre de Chartreuse, near Grenoble, taking 'short cuts' up mountains which increased our travelling time by about 50 per cent, we arrived in the late afternoon in perfect weather.

The campsite at St.Pierre, was below the village by the river and when we arrived was virtually empty. We marked off our area later to become delineated by a circle of Grots which with time became increasingly successful in keeping out frogs, insects and cows.

At St.Pierre most of our time was spent in the Trou-du-Glaz - Guiers Mort - P.40 system. Our timetable lapsed into a regular routine of getting up at 9.00 a.m. and by the time we reached the Dent De Crolles, the mountain in which the systems are developed, the sun was beating down mercilessly in the early afternoon. We discovered later that temperatures had reached at least the mid-nineties. Invariably we would emerge early in the morning, a couple of times in colossal thunderstorms.

The climax of our timing came in exploring the Bialet, a few kilometres from St.Pierre. The entrance to Bialet lies exactly half-way up a semi-vertical face of limestone, many hundred feet above the nearest road. The greatest obstacle was a scree slope, several hundred feet high, in a state which could only be described as unstable. Reaching the entrance, with N. hundred feet of rope and a ladder, only a few people had any energy left to descent, in the hope of seeing the magical 600 ft. shaft in the system. Much of the entrance system was laddered with the amazing 'ladder Francais', about four inches wide with rung spacings varying on the same ladder, between six inches and eighteen inches, strung together with 30 amp. fuse wire.

The descent of the scree slope was speedy; someone dislodged a boulder from the top of the slope, about the size of a small car, unfortunately, just missing our esteemed leader.

On Sunday, 7th. July, we moved camp to Villard-de-Lans, south of Grenoble, having lost one member, a Caucasian Winterhalder, and gained one negroid Winterhalder, who insisted on taking mad dogs for walks in the mid-day sun.

Our second camp-site was conveniently situated about ten yards from the main road to Villard-de-Lans, providing good entertainment for the travellers.

During our stay we visited, numerous caves and potholes, mostly on a smaller scale than the Trou de Glaz - Guiers Mort system.

One afternoon was spent on ladder practise in the Malaterre, a vertical shaft about 500 ft. deep in two steps. The first step, of 190 feet was descended by Jim to the strains of "Jumping Jack Flash" emanating from his portable tape recorder, strapped round his anatomy.

A system called 'Les Merveilleuses' was also entered. The entrance lies at the foot of a rather steep cliff, the road coming to the top of the cliff. One bright individual, followed by others,

decided to abseil what proved to be a near vertical mud slope, the problems of getting up again never having been considered.

Much of the time at Villard-de-Lans was spent surveying the "Gour Fumant" system, an epic 24 hour nearly non-stop survey, food being served at the surface, 'cooked' on a wood fire, the "apricots brule" being beyond comment (and digestion).

While on the subject of food, we brought two tea chests full of food from England, including endless crates of stewing steak (two varieties - bad and very bad), and enormous quantities of tinned pineapple, being very often mixed with the steak in a truly repulsive mixture to which tin-loads of curry powder were added to drown the flavour. Incredibly no-one had what they politely call "continental" stomach, less politely "galloping gut".

The caving being less tiring, in this region, we had more time to socialise. One evening we were invited to a Boy Scout campfire just up the valley, and were forced to sing such favourites as "Clementine" and "Ilkley Moor" etc..

We were also invited for tea by an English woman who ran a British Riding School nearby.

The weather was extremely good nearly all the time we were there, except of course, on the day we packed when the heavens opened up and soaked everything.

The journey back was surprisingly uneventful, stopping off at Dijon to surprise Dick Sutherland's aunt who lives there!

On the boat, vast quantities of liquor, cigarettes etc. were stored in the van, and of course, the English customs just had to pick on us. Luckily they had not bargained for poly-bags full of stinking grots and were put off the search rather quickly.

It is surprising, actually, looking back on the trip, how much caving we achieved, while still enjoying hours of lounging in the sun.

D.J.Warwick (I.C.C.C.)

TOURIST TRIPS IN THE TROU DU GLAZ

We obtained permission from Michel Letrone to visit the Trou du Glaz system again last year, on the same conditions as before i.e. that we were not to attempt to camp underground/explore, but would keep to the "tourist tracks" as the Clan De Triton is still actively exploring the system (over 17 km. long when Chevalier wrote "Subterranean Climbers" in 1950). Now that we have completed trips through all the system as described in his book, several days can be cut off a visit to the system by knowing not only the route but, of more importance when attempting through trips, the condition and availability of belay points. Hence, although the following account may appear to be unnecessarily detailed, it is primarily intended to supply essential information to any other club/group intending to visit the system, as it has been found that Chevalier's descriptions are extremely confusing and misleading unless one has visited the scene of the crime. Furthermore, he described the upward exploration, not through trips.

The P.40 - Guiers Mort through trip

This is undoubtedly a 'classic' trip, with a total depth change of 2,157 feet - over 1,300 feet being in pitches.

The P.40 is located by following the track up from the Col Du Coq, and past the Trou Du Glaz, following the painted arrows up on to the plateau. A track can be followed from the top of the cliffs towards the summit of the Dent De Crolles, but there is no track to the P.40 as one must cut across clints and grikes to the entrance rift, which is a few yards before the last trees encountered on the walk to the summit, and at the foot of the change in gradient to the right (i.e. West) of the main track. A small metal plaque marks the entrance.

The entrance rift may be laddered in several places, but Redhead bolts give a free descent of 103 feet (2 ft. belay). As the 'ally' bent during our descent, abseiling took place down a loose rift to the East of this - 10 ft. belay, with 65 ft. to a ledge and 30 ft. (free climbable) to the floor.

At the top of the rubble slope a cold draught blew out of Kid shaft; a narrow crawl led to this pitch - which is free climbable, but 15 ft. ladder plus 5 ft. belay is preferable for the bottom half, and almost essential for return, as it is surprisingly tight in one place.

York Gallery is mainly crawling over compact mud, with some walking and stooping; the route through this broad bedding plane passage, which is floored with boulders, is easy to find, the only point to watch for being the awkward 10 ft. climb (ladder preferable - 2 ft. belay) up into a narrow 6 ft. high meander which includes a short simple thrutch - probably windened since Chevalier's days as he

describes it as an 'exceptionally narrow squeeze?' At the end of this meander (20 ft. long) is a traverse to the right, round the wall of a circular chamber some 10 ft. in diameter and 20 ft. high, along a ledge leading from the floor of the meandering passage (which enters this chamber 8 ft. above the floor) leading to the head of Three Sisters shaft.

A dodgy sludge and boulder slope (15 ft. handline useful) leads to the belay point for the pitch proper. 20 ft. belay to a buttress allows the ladder to hang clear of the water for virtually all the descent of 32 ft. (which can be done on 25 ft. ladder in dry weather) when one must traverse from the foot of the ladder to a broad ledge on the right. Re-belay the ladder here to a French piton - 20 ft. belay, 27 ft. ladder, gives a dry descent. Several routes lead down from here into the various chambers mentioned by Chevalier. The most pleasant is a dry 55 ft. pitch, 5 ft. belay, from a small buttress in the meanders, although the other pitches are shorter. The last half of the pitch is free and ends in a small chamber; upstream leads to the original route up the Three Sisters.

Downstream a short crawl through a partially blocked bedding plane leads to a section where one traverses along meanders in 'Lost Johns' style, only with a 20 ft. drop below. Another boulder blockage preceded the appearance of Orbitalina shaft and one could pass above or below the boulders at the foot of this. Smooth, descending meanders similar to those in Stream Passage Pot (only taller) and Maypole Passage (O.F.D.II) led to Fireman Shaft - 20 ft. ladder, 5 ft. belay to piton; this was virtually dry, and very similar in appearance to the first pitch on the Hammer Pot in Lost John's.

The mud floored meanders continued and a couple of free climbable 8ft.-10ft. drops preceded the first pitch in Balcony Shaft - 15 ft. belay to a buttress, 30 ft. to a ledge; the last few feet are wet, and two 15 ft. wet pitches follow. It is possible to avoid the water here by semi-free climbing. Another large ledge makes it possible to avoid the water on the next section of the pitch, which is 70 ft. high. (65 ft. ladder, krab belay to bolt). The climb is very reminiscent of Lost John's Wet Pitch when laddered from the dry ledge.

At the foot of this one leaves the stream, which cascades down a gully to the head of the next pitch, by walking on to another ledge. From here a tricky climb of 15 ft. on the left leads up on to the Balcony - a 3ft.x4ft. ledge which has a similar situation to that above - wait for it - Wet Pitch, Lost Johns. Only one person need make the climb, which has good belay points for a safety line, as 15 ft. of ladder can be attached by a krab to the rawlbolt on the ledge.

Then 75 ft. ladder (5 ft. belay to bolt), down this rift (width above 20 ft.) leads to a rift chamber with a floor of small boulders;

the rift passage leading from this chamber to the pitch into Showerbath Chamber doubles back underneath the passage leading to the head of the last pitch in Balcony (i.e. the situation is very similar to that at the last pitch in Stream Passage).

By laddering through an eyehole to the left of the stream at the head of Showerbath the water can be avoided for over half of the descent (80 ft. ladder, 10 ft. belay). The soaking ruins an otherwise bone dry trip, and it is thus preferable to 'pendulum' on to a ledge leading to Midnight Shaft when about twelve feet down from the Balcony. This looked quite straightforward and leads to the dry route bypassing Showerbath; (i.e. Midnight Shaft - Pole Shaft - Bell Shaft) this was the route normally used by Chevalier but we followed Showerbath as its appearance belied its wetness, and it is a quicker route.

The meandering passage leading out of Showerbath Chamber soon breaks into a larger passage leading from Dome to the Landern Shaft. For much of its length the passage resembles a larger version of South Passage in Gaping Gill.

As Tony Waltham has already described the Trou du Glaz - Guiers Mort and Trou du Glaz - Annette Bouchacourt through trips (in L.U.C.C. Journal No.1) the following is a modified version of his descriptions and the tackle is given at the end as before.

The three Lantern Shafts, near the entrance to the Trou du Glaz, are all very close together and all easy pitches of 40ft.-50ft. A few yards of crawling leads to the main gallery. This is another large dry ascending passage, only interrupted by the fourth Lantern pitch. After this passage is again large and dry but is broken by a series of shafts which tend to replace the floor with space. The first small shaft blocks the way on and is crossed by climbing into an oxbow; an easy but exposed climb leads past the 120 ft. deep P.36, and a rocky traverse on the left of the 170 ft. deep Lake Shaft follows. A hole in the floor on the left-hand side of the passage drops down into some dry, awkward, tight and low meanders which lead, after some 50 yards, to the top of Lendulum Shaft. There is a convenient platform at the top of this superb pitch - 45 ft. free to a minute ledge and then 145 ft. free to the floor, down the centre of a clean conical chamber.

From here a narrow meandering passage, requiring a lot of traversing, is followed to Petzl Shaft - dry and free for 60ft. Trap Shaft, a few yards further on, is an awkward 45 ft. climb well showered from above. An easy climb (quicker with a ladder) leads up to Dubost Halt, a small platform overlooking Chevalier Shaft. This is a huge chamber with a free dry 115ft. pitch, from a dangerous piton, to a jagged floor, and a large hole in this leads immediately to another 75ft. pitch against a sloping wall. A stream comes down a side shaft here and is followed for a few yards along a high rift passage. At the sump one turns left up a

short sand crawl to emerge at the top end of the Guiers Mort main passage.

This is a fine, large, abandoned streamway; one turns left and traverses across numerous potholes filled with static water, the largest is the Swimming Pool, where a handline is required to get across dry. Soon after this the stream appears and as the gradient steepens, the first ladder is reached hanging from the roof. (The series of pitches from here to the resurgence should be laddered by working upstream from the Guiers entrance, although the pitches are all free climbable - depending on one's climbing ability!)

The ladder leads on to Stalactite Traverse - a well decorated bedding plane ledge running along the top of the vadose stream canyon. It leads to a decorated sporting passage leading to the Bivouac; this section is awkward with kit as it involves small crawls, high rifts and numerous traverses over potholes, rifts and streamways.

The Tyrolean Gallery, leading off from the Bivouac, is a complex series of interconnecting rifts and passages, and is the most well decorated part of the system that we have yet seen. Another fine large active streamway leads down from the Bivouac, to the ladder hanging from Siphon Gallery just before a murky sump. The bypass at the top of the ladder leads down a tube and up another ladder, to a variety of climbs down into another streamway. Downstream a short traverse above some waterfalls leads into the Christmas Basin bypass, though it is possible to swim through the Basin - a long low duck. The stream is followed for some distance and then a scramble over boulders in the Grand Canyon leads to the ladder up into the Labyrinth. This is a long series of muddy crawls and crouches, and the route is marked by cairns which show entrances of passages not on the route. One side passage here leads down to a fine green lake (part of the main stream, in fact).

The end of the labyrinth is marked by the Hurricane, where the wind can be heard roaring from some distance away. A ladder then saves time on the climb down from Climbers Gallery into a series of large chambers leading to the entrance. The stream appears in the end chamber and it flows out of a 20 ft. diameter tube on to the cliff face, the water dropping below for 30 ft.

A well marked track (arrows painted on trees), which has zig-zag and direct paths up through the woods, leads down to a large clearing (suitable for a parking space) in the woods, just upstream of Perquelin. The Fontaine Noire is passed approximately half-way down.

The Trou du Glaz - Annette Bourhacourt through trip.

The entrance of the Trou is a comfortable large phreatic tube gently descending past a snow drift; this ends in a short maze leading

to the Lantern Shafts. The route is then as described above up to the traverse round Lake Shaft. After this the traverse around P.60 on a muddy ledge, well provided with handholds, follows Labour Shaft, just up a side gallery, is most impressive, with smooth clean walls 30 ft. apart and water falling from high above. The end of the main gallery is soon reached at Fernand Shaft, an easy broken pitch of 75 ft.

A long earth ledge high above a deep rift leads to a narrow sporting rift passage where it is necessary to traverse. At the end of this is a free climb down a 70 ft. rift (a pitch in Chevalier's days), and at the foot are dry steadily ascending galleries. These delightful sand floored railway tunnels are only broken by the traverse Shaft and Climbers Shaft. Both are easily crossed on large holds, but a ladder is preferable on the latter merely to save time in climbing up the wall on the far side.

Grog Shaft is soon reached and descended - the only decent pitch on the trip with 35 ft. to a ledge and then a free dry descent of 60 ft. to the floor. From here the way on is through more large boulder-strewn passages and a well-hidden hole through a boulder choke - the Customs - is the only way on, followed by easy walking and four more chokes. One of these is a loose stone chute which tends to be self-blocking and is regularly dug out by the French.

Daylight is then reached; the passage leads abruptly on to a small ledge with an excellent view of the snow-covered Alps, and the Isere Valley 4,500 ft. below. The route back is along a very hairy path half-way up the immense cliffs on the southern end of the Dent de Crolles.

Tackle Lists.

P.40 - Trou du Glaz.

| | | |
|----------------------|-------------------|----------------------|
| P.40 | 100 ft. ladder | 2ft. belay to bolt. |
| | or, 100 ft. " | 10ft. " " flake. |
| Kid Shaft | 15 ft. " | 5ft. " " rock spike. |
| Three Sisters' Shaft | (15 ft. handline | |
| | (30 ft. ladder | 20ft. " " buttress. |
| | (30 ft. " | 20ft. " " piton |
| | (55 ft. " | 5ft. " " buttress. |
| Fireman Shaft | 20 ft. " | 5ft. " " piton. |
| Balcony Shaft | (60 ft. " | 15ft. " " buttress. |
| | (60 ft. " | Krab to bolt. |
| | (15 ft. " | Krab to bolt. |
| | (75 ft. " | 5 ft. belay to bolt. |
| Showerbath | 80 ft. " | 10 ft. " " flake. |

Trou du Glaz - Annette Bouchacourt Grotte

| | |
|-----------------|---|
| Lantern Shaft 1 | 40 ft. ladder to bolt. |
| Lantern Shaft 2 | 40 ft. " " " |
| Lantern Shaft 3 | 50 ft. " " " |
| Lantern Shaft 4 | 30 ft. " " " |
| Lake Shaft | 100 ft. lifeline |
| P.60 | 100 ft. lifeline |
| Fernand Shaft | 75 ft. ladder to bolt, 100 ft. lifeline. |
| Climber's Shaft | 75 ft. line, 20 ft. ladder, 10 ft. belay. |
| Grog Shaft | 100 ft. ladder and 200 ft. d.l. to bolt. |

May be abseiled through on a 200 ft. rope.

Trou du Glaz - Guiers Mort

| | |
|-------------------|---|
| Lanterns and Lake | As above. |
| Pendulum Shaft | 190 ft. ladder 10 ft. wire to pillar, 200 ft. lifeline. |
| Petzl Shaft | 60 ft. ladder 5 ft. wire to bolt, 150 ft. abseil. |
| Trap Shaft | 50 ft. ladder 5 ft. wire to eyehole, 100 ft. abseil. |
| Trap Shaft Climb | 15 ft. ladder 5 ft. wire to flake. |
| Chevalier Shaft 1 | 115 ft. ladder 5 ft. wire to dangerous bolt, 250 ft. abseil. |
| Chevalier Shaft 2 | 80 ft. ladder 5 ft. wire to flake, 200 ft. abseil. |
| Swimming Pool | 20 ft. handline to 2 bolts. |
| Stalagmite Pitch | 30 ft. ladder 10 ft. wire to stalagmite. |
| Syphon Gallery 2 | 40 ft. ladder 20 ft. wire to bolt. |
| Syphon Gallery 1 | 30 ft. ladder 15 ft. wire to bolt. |
| Basin Bypass | 25 ft. ladder 10 ft. wire to bolt. |
| Grand Canyon | 30 ft. ladder 10 ft. wire to stalagmite. |
| Climbers' Gallery | 25 ft. ladder 20 ft. wire to flake. |

Postscript: Weather Conditions

Our trips in the P.40 were made in excellent weather; in wet weather there could be a considerable amount of water on some of the pitches and virtually all pitches would be quite wet. It is often impossible to avoid the water.

Trips through to the Guiers are very dependent on weather conditions as only slight rain is needed to sump the crawl from Chevalier Shaft into the Guiers - it seems best to check this the day before. Also heavy rain will sump the passage from Climbers' Gallery to Main Chamber - so trapping

a party in the Guiers; there is however a very loose bypass over this, which can only be done from the outside. Finally the flood levels that we saw also sumped part of the Labyrinth.

J. Winterhalder (I.C.C.C.)

A note on caving in the Vercours and adjacent areas.

During the past two years, members of I.C.C.C. have visited the Vercours and Dent de Crolles areas (S. and N. of Grenoble respectively) on four occasions, and have therefore been lucky enough to see them under virtually all conditions - flooding, wet or "dry", and in summer and winter.

As the Dent de Crolles area is distinct from the Vercours it is not dealt with here.

The caves in the Vercours may be divided into the two basic groups:-

1. The sinks on the plateaux, many of which are known to lead to systems of considerable length and depth.
2. Fossil and active resurgences in the valleys.

These areas will be discussed separately.

Resurgences:

Undoubtedly the most significant resurgence is the Grotte Gournier; already explored for over 8 km., this massive active resurgence, impressively decorated with fossil stal. formations of all kinds, is still being explored by the French. The 200 ft. long entrance lake limits the number of trips possible into the cave; its neighbour the Coufin, however, has been turned into a show cave and is liberally decorated with straws.

One of the most interesting round-trips in the world may be made by entering the Chevaline, a few hundred yards from the Coufin, and swimming through several static sumps and ducks until its junction with the Coufin is reached. Both caves have the same source of water, although the Chevaline only flows in wet weather, and the junction is several kilometres in. The round trip can only be made in drought conditions, once or twice a year (about September, usually) on an average. Exploration upstream has stopped at a wet shaft over 100 ft. high. The Coufin streamway also has several ducks and sumps.

While the further exploration of these systems presents not inconsiderable problems, in the way of flooding difficulties and risks, the majority of resurgences in the Bourne Valley and elsewhere are bone dry, as these phreatic systems are virtually completely fossil. They commonly end in a flowstone choke - a result of their "over-decoration" after active flow has ceased. Examples are the Merveilleuses, which contains once excellent formations which have been subjected to vandalism, and the Favot. With only pitches of 113 ft. and 80 ft. respectively they make pleasant short trips, and have unique formations - the former calcite crystals, and the latter a 130 ft. high stalagmite boss, and unique entrance tube.

Many caves with impressive entrances - such as the Bournillon - 300 ft. high, 100 ft. wide, and the Grotte Roche - 18 ft. high, 30 ft. wide - turn out to be extremely disappointing inside, being large phreatic tubes floored with boulders to a choke. Many of the numerous holes marked on the slopes of the Bourne Valley on the map are short and uninteresting - e.g. La Four, Trou Cambuse, and many others.

One wet weather resurgence visited, the Grotte Des Ramats, came closer to British dimensions than any other seen, being a roomy streamway up to a clear static sump barring the route to thousands of feet of well decorated passage, thought to have only been visited on one occasion.

Sinks:

Obviously the most important is the Berger, to the north of the Vercours proper. This has been dealt with in many publications and little need be said of the system, although there is a chance that it may soon be third on the depth record, as on our last trip to the region a new shaft, with passages at the bottom, was discovered by the local group, the Groupe Spéléologique du Vercours, and exploration is still continuing. The pot has great potential, with an entrance pitch of 250 metres free.

The pots have varying difficulty, ranging from the Gour Fumant, a moderately complex, well decorated and straightforward cave of Freby standard, to those of over 1,000 ft. deep such as the Trou Qui Souffle. This wet cave is similar to the typical Yorkshire system, but is of greater interest as it combines length (- 5 miles) with depth. The Trisou, said by some to be the hardest trip known in the Vercours, is 905 ft. deep, wet all the way, and with plenty of pitches, ending in a 155 ft. pitch, straight down the water. Belays are thought to be difficult to find, and the French use 'Redhead' bolts - take your own 'ally'! However, as they use bolts on the pitches with excellent natural belays, it is doubtful whether the scarcity exists or not.

In contrast to these extensive systems, the Gouffre De Malaterre has little horizontal development, and an entrance shaft of 420 ft. is

is floored with a boulder slope leading to several short passages and drops into a rift 30 ft. deep. This widens into a short mud choked streamway - with excellent digging possibilities. An easy route via gour steps of up to 40 ft. high and meanders connects a ledge 175 ft. down with the floor of the main chamber.

Not all the plateaux, however, have such potential for new discoveries. For instance, to the north of La Balme the area is a great rubble heap and little can be hoped for without extensive "banging"! On the St. Julien Plateau above the Bournillon the caves are bedding plane fossil sinks of little note e.g. Balme Chinelle.

There is so much to visit in the area that the above article is only a brief outline of the type of caving that this area offers. Apart from high quality "tourist" caving there is unlimited potential for original exploration, as the recent discovery of the open 250 m. shaft shows!

Further information on caves in the area can be obtained from L.U.C.C. Journals 1,5,6,7 and 9 and from the Secretary, Imperial College Caving Club.

J. Winterhalder (I.C.C.C.)

PEN-Y-GHENT POT

When I read this years meets list, I was somewhat amused.

"Yes, Roger." I said "Very witty, but what are we really doing on 25th?"

"Penyghent!"

Despite my pleading, I was obliged to do some training, which was restricted to 'squeezers' (so I could cluth the ladder more tightly) and seeing how far I could swim underwater.

Thus it was that I arrived in Yorkshire, a cheap, cardboard imitation of a fit caver, about 2.00 a.m. Saturday morning. We stayed at the Craven Hut and were met by an amiable character who found us beds, made us some tea, and even remained polite when asked such questions as "Yes, Car Pot was an achievement, but what have you been doing since 1948?" When we retired at last the merry trickle of water in Bront's Gill outside somehow failed to lull us into peaceful slumber.

The morning was a succession of fiascos, after we left - Jon Hallam remembered that he had left his boots behind, and as we returned

someone was heard to remark "that reminds me, I was going to write a letter to my girl-friend". After we finally arrived at the shepherd's hut near the pot, Rog Scott also found that he had mislaid his boots, so he took the mini-bus back to Horton.

To everyone's amazement, we were finally ready and an easy walk of about a mile brought us to the entrance, a few yards to the left of a sheep-fold.

The entrance itself is held apart by an old rusty bedstead and is fairly tight. On the way in, the dreaded canal and other crawls seemed quite easy - I never felt a thing. Then comes the first pitch, wet and miserable, followed by the second pitch, also wet and miserable. These subtle changes of environment were not lost on the intrepid adventurers. The third and fourth pitches are the largest and follow in rapid succession; they are, however, comparatively dry. Double lifelines were rigged on both.

The fifth pitch was so nondescript that I can not remember what it was like, but from then on to the tenth pitch, the passage follows a fairly tight rift in which a number of variations on laddering, chimneying and traversing can be played. In fact, we free climbed the sixth pitch, and inserted another between the seventh and the eighth.

From the tenth pitch I floated down the slowly flowing streamway in comparative comfort. On my arrival at the eleventh, I was met with despondent looks.

"Too much water - twelve'll be impossible".

And so it proved to be. I was quite cut up about it, - I had visions of bottoming it and spending the rest of my caving career treating incredulous freshers to a highly coloured version of my experiences.

Deladdering went well, if slowly, until, at the top of the third pitch, Tony Waltham looked at his watch and began to thrutch violently upwards. Deducing that it must be nearing opening time, I followed him with equal enthusiasm.

We must have taken a wrong turning somewhere because the entrance crawls seemed several miles long. However, we reached the surface around 8.45 p.m. after $7\frac{1}{2}$ hours underground. After changing and walking back to Horton we were left with a full hour's drinking time, but I had to restrict myself to half-a-pint, not having the strength to lift anything larger.

Those taking part were John Hallam, Tony Waltham, Roger Bowser, Roger Scott, Rob Basto, Tony Reynolds and Chris Hinchcliffe - all of U.C.L.S.S.

Tackle list:-

| <u>Pitch</u> | <u>Ladder</u> | <u>Belay</u> | <u>Rope</u> | <u>Belay</u> |
|--------------------|---------------|--------------|---------------------|--------------|
| 1 | 20 ft. | 10 ft. | - | - |
| 2 | 15 ft. | 25 ft. | - | - |
| 3 | 55 ft. | 5 ft. | 125 ft. (double) | 10 ft. |
| 4 | 70 ft. to | previous | 150 ft. | 50 ft. |
| | | ladder | (double) | |
| 5 | 25 ft. | 5 ft. | - | - |
| 7 | 25 ft. | 15 ft. | - | - |
| 7 a | 15 ft. | 5 ft. | - | - |
| 8 | 25 ft. | 10 ft. | - | - |
| 9 | 30 ft. | 10 ft. | - | - |
| 10 | 25 ft. | 20 ft. | - | - |
| 10 a | 10 ft. | 5 ft. | - | - |
| 11 | 25 ft. | 10 ft. | 50 ft.* | - |
| 12 (not descended) | 30 ft. | 15 ft. | 50 ft. (single) | - |

* Used while getting on ladder.

Tony Reynolds (U.C.L.S.S.).

(Since when has Tony Waltham been a member of U.C.L.S.S.? - Ed.)

L.U.C.C. JOURNAL - REVIEW OF PAST EDITIONS

For any readers who might be interested in buying past editions of this Journal, here is a brief summary of number 1-8.

Number 1, December, 1966.

Includes the 1966 I.C.C.C. summer expedition to the Trou du Glaz, Grenoble (with relevant tackle lists) and brief accounts of trips down Hammer Pot, Easegill and Moregill. This edition also contains a note on the Oxlow-Giants connection, a short article on Britain's longest caves and a superbly written 'funny' on Juniper Gulf.

Number 2, March 1967.

Contains an account of the 1965 U.C.L.S.S. expedition to Turkey, to the 'Bey Daglari' limestone mountain range on the south coast of the country. Also included are articles on poling in Lost John's, digging in Swildons 7, Car Pot, Short Gill Cavern, the Grotto of San Giovanni (Sardinia), and the Allt Non Leac Cave (Skye).

Number 3, June 1967.

This edition begins with a lengthy article on the development and geology of the Stump Cross - Mongo Gill system (with maps), followed by short articles on Rumbling Hole in flood and Frog Pot, Priddy. After these there are descriptions of extensions in O.F.D. II (with survey) and a trip down Gingling Hole. A special feature of this issue is the supplement at the end:- Revised tackle lists of Major Yorkshire Potholes.

Number 4, October 1967.

Includes the 1967 Gouffre Berger expedition (lead by Ken Pearce) with sketch maps, boating in the Krizna Jama, Yugoslavia, the 1967 U.C.L.S.S. Pindus expedition (also with sketch maps), and a description of the Grotte Gournier.

Number 5, January 1968.

This issue contains a very good scientific article on helictites, types and formation thereof, supplemented by diagrams. This is followed by another lengthy description of O.F.D. II with survey and sections, and brief notes on Lost John's (Wet Pitch) and the Gouffre Berger.

Number 6, April 1968.

The saga of the 1967 I.C.C.C. Christmas meet forms the bulk of this journal, with descriptions of the Grotte de Couffin, the Grotte de Gournier, the Grotte au Bournillon and many others. It also contains a plan and section of the Grotte Favot. Also included are articles on Smeltmill Beck Cave (with sketch survey), Car Pot, and the structural formation of Tatham Wife Hole (with survey).

Number 7, June 1968.

This is, in most people's opinion, the best L.U.C.C. Journal yet produced with a description of Rumbling Hole (with plan and section), a geological article on eastern Mendip, a description of

Marble Steps (with plan and two sections), followed by accounts of trips down Nick Pot and Far East, Gaping Gill. This last article could aptly be named 'How the I.C.C.C. missed the discovery of the year!'

Number 8, Autumn 1968.

A largely international edition with accounts of expeditions abroad to Ireland (I.C.C.C.), Turkey (with survey, the Joint British Universities Speleological Expedition to Rumania (with maps) - organised by Q.M.C.C.S, France and Kenya.

We have no more copies of Nos. 1-4 remaining, but Nos.5-8 are still obtainable from the Editor (see page 2 for address) at 2/- for No.5 and 2/6 for Nos.6,7 and 8 (better quality surveys), including postage.

This Journal is also obtainable from Bryan Ellis, Knockauns, Combwich, Bridgwater, Somerset, (he may still have some copies of Nos.3 and 4), and from the Pen-y-Ghent Cafe, Horton-in-Ribblesdale, Settle, Yorkshire.

JOURNAL EXCHANGE

As a sequel to the remarks in No.8, we have heard from all clubs with which we had an unsatisfactory exchange except the Bradford and the White Rose Pothole Clubs. Anyone know what they are playing at?

In addition, we now have exchanges with the Orpheus C.C. and the Grampian S.G.

Finally, apologies to the N.P.C. for an incredible display of ignorance in replacing 'Pennine' by 'Pothole' in their name.

Notes and News.

Langcliffe Pot, Wharfedale, has been extended to $3\frac{1}{4}$ miles by the Y.U.R.T. and U.L.S.A. The new passages are mainly "walking" streamways and have no pitches but flood very easily.

Growling Hole, East Kingsdale, was dug out and explored by B.S.A. members to a depth of 340 ft.; it includes little horizontal passage but does have a wet 250 ft. pitch, fortunately well ledged.

Sunset Hole, was extended recently to 240 ft. deep via a series of small chambers by the Heavy Woolen District Pothole Club.

Mexico. Christmas 1968 again saw the McMaster University cavers back in Mexico, this time including Julian Coward (U.C.L.S.S.) in their team. They explored a number of new potholes and caves, and also pushed the Sotano de San Augustin to a sump at 2,000 ft. depth. We hope for a report in the next journal.

Pasture Gill Pot, Hockenthwaite, has been found and explored by B.S.A. members and is now 340 ft. deep offering a choice of routes down.

Sleets Gill Cave, Littondale, is now 4,300 ft. long due to efforts of U.L.S.A.; the new series is entered by a very wet crawl and leads to some larger passages and a huge inclined tube ascending over 200ft. Flooding makes this cave extremely dangerous.

Hunt Pot: N.P.C. have entered the rift beyond Shrapnel Pot and found a lengthy passage leading north-west.

Ilam Rising, Derbyshire. Phil Collett (I.C.C.C.) and James Cobbett have been diving recently at the main rising at Ilam Hall which in dry conditions produces the entire flow of the River Manifold. The water emerges with considerable force and the divers first penetrated a very dicey boulder choke and entered a gently descending bedding plane passage going upstream. This has now so far been explored for 86 ft. to a depth of about 30 ft.

Notts Pot, A U.C.L.S.S. party bottomed the centre series, and seem to think that it is wetter since the entrance collapsed!

Newby Moss. As a correction to the note on P2 in Notes and News in the last Journal, the 260 ft. pot mentioned is not P2, but referred to as Newby Moss Pot. It appears that individuals other than the Gritstone were responsible for digging it out; the Gritstone are digging further west in the Newby Moss complex. A nearby pot, formerly P2a, now Grey Wife Hole, is being investigated by the Kendal Caving Club. P2, apparently, has not been investigated.
