

**SOUTH WALES
CAVING CLUB**

NEWSLETTER



S O U T H W A L E S C A V I N G C L U B

No.71

NEWSLETTER

February 1973

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Cover Photograph - Maypoling in Ogof Ffynnon Ddu III, from a
coloured transparency by P.M. O'Reilly.

Price: 20p (Members); 40p (non-Members).

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SOUTH WALES CAVING CLUB

BALANCE SHEET AS AT 31 JANUARY, 1972

CAPITAL BALANCE at 31.1.72	£		£
	5,043 07	Club Premises	200 00
		Garage (Cost	15 00
		Duplicators	83.61
		less written down 15%	<u>12.54</u>
		Equipment	5,691 00
		less written down 15%	<u>854 00</u>
			4,837 00
			5,123 07
Revenue Balance	630 92	Debtors	
H.Q. Repairs Fund	900 00	Subscription	3 00
South Wales Cave Rescue		Donations	80
Organisation	283 39	Fees 1969/70	54 50
Ogof Ffynnon Ddu		Fees 1970/71	1 86
Conservation Fund	58 72	Fees 1971/72	<u>10 06</u>
Subscription for		Deposit Account	833 00
1972/73 Prepaid	<u>26 00</u>	Current Account	927 18
		less uncashed cheques	<u>45 96</u>
		South Wales Trustee Savings Bank	4 47
		Cash in Hand	<u>30 12</u>
			1,819 03
			<u>6,942 10</u>

Hon. Treasurer: K.J.G. MADDOCKS
16.3.1972

Hon. Auditor:

How are we going to get a stretcher patient out of Ogof Ffynnon Ddu III?

On November 18th a small party took a stretcher and some assorted ironmongery into a rift passage just off the "Big-Chamber-Near-the-Entrance" in Ogof Ffynnon Ddu with a view to trying out a system for bringing a patient across a long traverse (bearing in mind particularly those on the way to Ogof Ffynnon Ddu III).

The system proposed involves running the stretcher along a wire rope slung between two rawlbolts (one at each end of the traverse). The sag in the wire, which would be quite considerable over a length such as the 300ft in question, is reduced by means of stemples wedged across the passage at intervals, on a level with the two rawlbolts. The wire is allowed to run freely over these stemples and by using a sufficient number of them the sag can be reduced as required without increasing the tension in the wire. The stretcher is then hung from the wire on two runners (one at each end of the stretcher) so that it can be slid along. The stemples are negotiated by using an extra runner at each end of the stretcher which can be clipped onto the wire beyond the stemple to be passed. The weight of the stretcher can then be transferred to this "new" runner and the "old" runner can be removed from the wire to become the "new" runner at the next stemple and so on. This process is of course repeated for the runners at the other end of the stretcher. The wire has a subsidiary but none the less important use in that the stretcher party are able to clip onto it by means of their waist-lengths, thus using it as a safety line, so leaving hands and more concentration free for dealing with the stretcher.

The trial on the rescue practice weekend indicated that the system was basically workable, but that the runners would have to take the form of pulleys, not karabiners as it had been hoped, the friction between the karabiners and the wire rope proving far too great for reasonably speedy forward progress to be made.

The idea is, as you will gather, still in its embryonic state and any ideas for improvement will be gratefully received, together with any offers from people willing to construct the necessary runners.

JEREMY ROWLAND
November 1972

A Success Story

Along with two other members of the Club, D.M. Judson and J. Harper, we formed part of a Speleological Reconnaissance Expedition to Iran. Cavers from all parts of Britain took part, under the leadership of J. Middleton of the Yorkshire Ramblers Club, whose original idea it was to form an Expedition to the Zagros Mountains, in North-western Iran, part of the old Kurdistan.

The Expedition was to last for six weeks, taking one week travelling out, three weeks to be spent in the field, or should I say mountains, then the final remaining two weeks on the journey back. All this was to be done in a thirty-hundredweight Commer van (breadvan) plus a new (white) Landrover.

It took over a year of planning and hard work, especially by J. Middleton, writing many long, difficult letters for support. Thus we all gathered at Ramsgate on the 28th August 1971. By Monday the 30th August we were outside Istanbul, after travelling through France, Belgium, Germany, Austria, Yugoslavia, and Bulgaria. We then moved straight for Ankara, by Thursday 2nd September, we were at the Iranian border which was about 10 miles down the road from Mount Ararat, which was most impressive. We passed a convoy of Turkish tanks near the border. On Saturday, 4th September, we arrived in Kermanshad; the first night we stayed at the local police station.

Kermanshad lies on a wide flat plain at the northern end of the Zagreb chain. The view that dominates the city is a mountain called 'Kui-parau', which is 11,300 feet above sea level, this was our target. First day we looked at the resurgences that bubble up out of the soil around the base of the mountain, and then at the famous wall-carvings of Tag-e-Bustan and Bisitun. That day we had our first casualties with the heat.

The next day two parties went high, one was to go and explore a ridge at 8,000ft, the other party was to go right to the summit. I should say at this stage in the expedition we were convinced there were leopards around every corner or hole we should pop our heads into, this was named 'leopard roulette'!! The two parties returned - the first had little to report, fortunately no big cats; the second (summit) party had something better to report. A plateau lying about

700ft from the summit and had some promising looking holes which we will come to later.

On the same day, the leader, J. Middleton, had been given by the Governor General of Kermanshād a camp site, some 20 kilometres from the city. It was situated next to a large resurgence which was ideal, as on our days off we could have lovely cool swims.

Two areas received our attention, the plateau that had been found early on in the expedition, and one more 'Tang-e-lutān'; this lay to the north of Kin-paran at an altitude of approximately 9,500ft. Three men spent three days exploring shafts up to one hundred feet deep. These all proved to be choked or too tight, any offers! Meanwhile on the kin-paran plateau things were quite different as strike hole found on the previous visit had a cave in the bottom, this is now known as 'Ghar Parau'. The four men explored as much as possible before they ran out of supplies.

The cave started off with very large chambers dipping steeply at about 30°, connected by boulder chokes or by crawls, until a shaft some 113ft deep was found. At the bottom the cave changed completely - more like a Yorkshire pot, tight and twisting passage followed by round circular shafts.

Now all the efforts of this very small expedition were turned towards the cave, it was the last week and something had to be done.

The walk up was very hard, a climb of 5,000ft with caving and camping gear plus food all on our backs in the heat was very hard going. The tactics were simple, a team would explore very deep, using ropes only, the next surveyed and photographed as well as acting as general support.

This paid off and on Thursday, 23rd September, 1972, P. Standing, Mike Jenkins, and G. Edwards explored to a depth of 2,370ft and still going; this took 26 hours.

Nothing left now but to make for home via the Black Sea coast, and then to Istanbul, through Greece into Yugoslavia, up the Dalmation coast through Northern Italy, passing the Dols, across to Austria, Germany, Belgium and France.

At Ramsgate we were two short, Dr P. Standing went to Nepal via Baghdad! G. Edwards was left in Yugoslavia, suffering from pneumonia. M. Jenkins had caught typhoid and para-typhoid, as he later found out, in Turkey. Thus we arrived in Ramsgate slightly changed in mind, body and soul!

HARVEY G. LOMAS
May 1972

MAZEWAYS II or DAN-YR-OGOF IV?

Dan-yr-Ogof is a diver's paradise and until recently diving, as some would say was all that it was good for. The hours and hours of heavy portering have at last paid off with an extension worthy of being called an extension. With all the potential that the cave possessed it seemed incredible that so much effort should go for nothing.

The latest diving developments can best be said to have begun on 22nd July. The water level was probably the lowest this year and 'Mazeways Left Hand Sump' seemed the ideal place to go for. However we only had 1 tad at our disposal, plus a 'mini bottle' which was only partly full. About 260ft from base a large airbell was found about 20ft long and 5ft high. The 'mini bottle' was dropped (purposely) and the end of the line reached at 300ft. Taking the lefthand passage, the larger, 30ft-40ft of line was reeled out before it was realised that the passage was completely mud filled. Returning to the end of the line the smaller passage was followed for 50ft until it got larger and deeper. The line was tied off at about 340ft and return to base made.

The following week the weather having remained dry, was perfect for a further attempt, using this time a large bottle and a 700ft line reel. The plan was for Roger Solari to dive as far as possible on a tad, drop the line reel and return. Progress could then be made on a 45 cu.ft cylinder. When after half an hour Roger failed to return the line was cautiously followed, passing the previous week's limit and about 40ft - 50ft further on finding 'air' and Roger's kit. Hurriedly dropping mine he was soon found wandering around in a large sump chamber that we named the 'Mirky Sump'. There was about 800ft of passage altogether and 4 more sumps. A promising high level passage was noted above the 'Mirky Sump' but entry could not be gained.

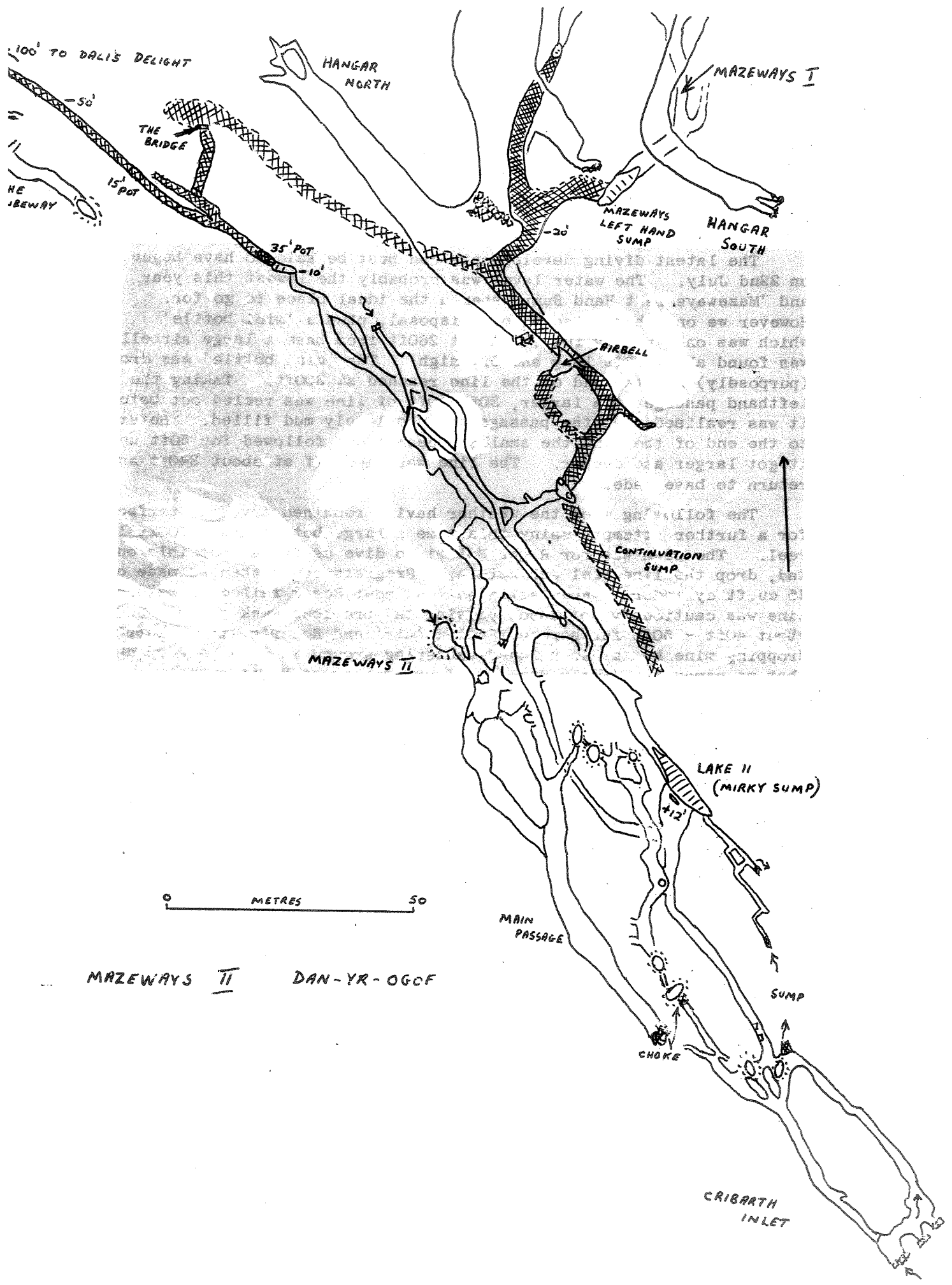
Taking advantage of the low water conditions and the abundance of air the 'Deep Sump' in the North of the extension was dived. Descending a muddy pot for about 40ft the passage levelled off and passing a junction to the right the tube, about 4ft - 5ft in diameter was followed horizontally for about 100ft to the top of a deep shaft (over 30ft). Here the line was tied off and return made.

The 'Mirky Sump' was then dived, assumed to be the mainstream and consequently named Lake 11. The pool was over 30ft deep and a bit constricted at the bottom, visibility being nil.

We then returned to a cold Mike Coburn who had patiently waited alone for over four hours. The extension was best named Mazeways II.

On 12th August a further dive was planned. This time rope, pegs, boots and spare bottles were to be taken through, to enter the high level passage noted previously. The water level was high which meant that Mazeways Entrance Pool had to be dived for 50ft - 60ft as well. The airbell at 260ft only had 1ft of airspace, so was rendered useless as a resting place. Having problems with being heavily overweighted the dive was difficult in both directions.

The high level passage was soon entered by 'lassooing' a rock projection at about 10ft height and once up it became evident that we had



MAZEWAYS II DAN-YR-OGCF

indeed been lucky. Following passages to the left a large stream was soon heard but all routes to it were seemingly boulder choked. After about a quarter of an hour's dig a squeeze was passed and the stream reached. It wasn't Dan-yr-Ogof IV but it was big - about half the size of the Great North Road stream. This was the same stream that flowed into Lake 11 from a sump to the South. Following it upstream for about 200ft, masses of foam along the roof, an impenetrable boulder choke was reached. There may be a high level route over the top but the area is 'slightly' unstable.

Returning towards the original climb up, a very complicated series on several levels was entered. The main Passage, later found to trend due South like nearly everything else, was about 30ft high and 15ft wide for several hundred feet ending in a formidable boulder choke. We eventually packed up after spending 5 - 6 hours beyond the sump and made our way out.

The following week low water conditions prevailed and the extension was visited again, this time with the aim of getting the survey started. The dive in was not without its share of excitement. Waiting in the airbell Roger appeared after some time a bit worried by the fact that the tad he was using (left in the cave for the best part of a year), wasn't giving air when he wanted it. Luckily we had a spare and he changed over.

The survey of over 2000ft was a long job, but about 1000ft of additional passages were found mainly within the previous boundaries consisting largely of crawls. No obvious 'way on' was found but several very promising high level passages remain to be entered, by climbing. Digging some of the chokes may be worthwhile but perhaps diving will be the easiest. We are on the right track - it is just a matter of time.

Many thanks to all those who have either 'ported' or waited around. We are very grateful for their help and without them many of the dives would have proved impossible; their time will come.

M.F.

SOLO CAVING : AN APPRAISAL

That one should under no circumstances cave alone has long been accepted as a prime commandment among speleologists. I hope here not to change this sound rule, but to put its application into perspective.

Consider some examples: First a Derbyshire mine with several long, awkward pitches which are normally self-lifeline because of rope return problems. As with many mines loose rock abounds. At what disadvantage is a solo caver? When with a party a caver is virtually alone, accepting the danger of someone dislodging a rock on him, because when on a pitch should he come off the ladder and swing on the rope, only his own skill can save him from death by waist-constriction as it could take many minutes for a comrade to reach him over maybe 150ft of ladder. You may say then that the exploration of such a mine is excessively dangerous: maybe it is but no more so for, I contend, a solo caver.

Now the second example: Ogof Ffynnon Ddu. Parties are often taken deep into this cave by leaders who again are virtually solo cavers by virtue of the fact that should they have an accident, in many cases no one in the party would be capable of going for help. Many of the club's leaders, including myself I must confess, take parties who for many reasons are ill-equipped for the projected trip. Situations have as a result arisen and I fear will continue to arise in which too much dependence, placed on the other bloke's lamp, routefinding ability, judgement of stream conditions, etc., has caused trouble. In fact the traditional safety features of team caving are being eroded by complacency.

In defence of solo caving:

(i) How often will the rest of a party be able to help if you are hurt: what is their first-aid like, could they fetch help alone?

(ii) How often does the action of one person injure another: e.g. falling stones?

(iii) The work, physical and mental, of leading a party especially one with a 'weak link' can endanger other party members by virtue of distracted concentration, extra tiring work, etc.

(iv) Situations, e.g. going for help, may arise in which competent solo caving will be required of YOU.

(v) In these days of laxness and complacency with respect to safety precautions, it is salutary to be in a situation in which their need is unquestionable: help is hours away. One cannot rely on sharing one lamp between two; you must know the route, you must exercise the greatest possible care and use your judgement more keenly than ever. In all, solo caving 'tones one up' for normal caving.

Qualifications: The practice puts an unreasonable burden upon a rescue organisation: they may be called out to your assistance after an incident so trivial a party could have coped with alone. If you suffer an injury when with a party they could at least do something, e.g. pull your unconscious body out of the few inches of water in which you would otherwise drown. The solo caver may behave more carefully when alone, or he may, in the absence of mature controlling influences a party might provide,

act rashly. But at least the "showing off" syndrome particularly prevalent in mixed parties cannot affect the solo caver. In short a solo caver must be as sure of his mental ability as of his physical, since the psychological effects of solo caving are far greater than those of team caving.

I have in my arguments used examples of either particularly hazardous caves or of situations in which rules are being broken already. Obviously when these situations do not arise: the everyday case, many of my arguments fall down and solo caving may rightly be condemned as dangerous and unfair to rescue services.

To sum up: try solo caving for size if, if, if, if, but, please, don't make a new sport out of it.

BOB HALL

LLETHRIDD Cave.

It has been reported that there have been some changes in the entrance passage to Llethridid Cave, by way of boulder movements. These have the effect of reducing the space between rock and water at a few points. As a result the cave may now be more hazardous from the point of view of flooding. A smaller rise in water level is now needed to make certain places impassable, particularly for larger cavers.

* * * * *

CONSERVATION OF RESOURCES

In this age of supposed increased public awareness and conservation have we, as cavers, our priorities right? There are several ways of ruining a cave, e.g. quarrying it away or by slow despoliation from litter and vandalism. We have a conservation officer to look after the major issues such as the first example, but there is no answer to the second.

From the moment a cave or passage is laid open it treads a path of destruction. The purists, e.g. the biologists would say that once the cave is entered the whole biological equilibrium is upset; this is no doubt very true but this aspect is completely drowned by all the other demands made on the cave. Litter may disturb the biological equilibrium but a solution may partly be found in education. Vandalism in the more gross sense as e.g. the breakage of formations can never be rectified so the utmost care must be advocated. No one likes to tread a path set out by tapes as at 'Flabbergasm' or the 'Columns' but we must face up to the fact that all cavers are prone to slips or moments of unawareness. So anything that reduces the risk of damage is to be upheld.

No one appreciates the beauty of a new passage more than the original entrant but once the subsequent tourists flock in the damage accelerates. With at least a threefold increase in numbers participating in the sport by the end of the century the pressures and damage will greatly increase.

Where the passage or cave is difficult of access, either from natural or by imposed rules from without, a second entrance has inevitably been sought. This device upsetting the natural equilibrium enables the caver at his physical limits to achieve greater extensions with less effort. To support this view the accident risk is pointed out and this together with the demand of the majority of the caving world to share in the finds results in an efficiently dug second way in.

Typifying these trends are Ogof Ffynnon Ddu and Dan yr Ogof. When Dip Sump was passed, true there was a just accident risk and the Cwm Dwr second entrance was needed Then the Clay Series, etc. was found upstream and this necessitated a third entrance. Via these entrances great progress was made, the accident risk was slashed and perhaps most important of all unlimited vandalism has occurred. Today, therefore, the Columns are but a shadow of their former glory; White Arch Series has been ruined and various other formations have been either broken or caressed by muddy hands and boots.

Dan yr Ogof in contrast stands comparatively untouched.

It is frequently bandied about that "when we've got the second entrance we'll push ...", e.g. the Far North. But Dan yr Ogof even more so than Ogof Ffynnon Ddu could not stand the increased pressures. The straws are far more vulnerable and Flabbergasm in particular would soon cease to exist (the tapes have already been abused). A similar forecast could be predicted for the Grand Canyon and Cloud Chamber. As it stands the cave itself and the weather are the ultimate conserving agents and this equilibrium should not be upset.

There was no need for Ogof Ffynnon Ddu II Top Entrance. The accident

risk could have been partly removed by marking out a site and blasting in quickly should an emergency have occurred. The deterrent to cavers of the long trip back to Cwm Dwr would have stimulated caution and enabled only a minority to despoil the upper reaches of the cave.

But the clock cannot be turned back, at least, not for Ogof Ffynnon Ddu. Dan yr Ogof still has a chance, but a second entrance would be the last straw.

At the moment the trip to the Far North is the finest trip in the country. Let's keep it that way and leave something for the cavers of 20 years' time to see and find. Let's try and learn from the too expensive lesson of Ogof Ffynnon Ddu and remember that damage caused by cavers is as important to rectify as that of a quarry.

MARTYN FARR

Croydon Caving Club

There has been a rumour circulating to the effect that Croydon Caving Club have lost the lease on their cottage at Pen-Fathor Isaf, Ystradfellte, Breconshire. They have asked us to state that there is NO TRUTH in this rumour at all.

EASTER IN IRELAND

Pete Ogden, Martin Farr, and the O'Reillys.

+++++

Happy with the knowledge that at least two of the natives wouldn't stone them, Pete Ogden and Martin Farr joined Paddy and Sue O'Reilly in Ireland for a week's caving at Easter. The idea was a tourist look at Clare and then onto Fermanagh to see what was worth diving. Whereas Clare is well documented, information concerning the northern area was much scarcer and therefore the prospects were more inviting.

The special branch men at Holyhead nervously fondled the green kit-bags, but Peter and Martyn weren't on the wanted list so were allowed to proceed without the bright light treatment. Like an Irishman's donkey, the O'Reilly's car was loaded in Dublin to a hair's breadth of the point where it would kneel down in the road and refuse to move. The party arrived in Lisdoonvana on the evening before Good Friday having decided on the way that the Guinness in Ireland tastes just as peculiar as elsewhere. The Welshman was pleased to point out the bi-lingual roadsigns. Mrs McCarthy said not to be alarmed at the evidence that the inside of the cottage had been blasted with a shot gun as the police were keeping an eye on the culprit!

The next day they wondered whether to continue with the caving idea or to build an ark while there was still time. The Killearney valley was flooded and a race in the afternoon showed that all the caves in the area were in full flood. Pollelva pot was laddered in the hope of a Pollnagollum through trip on the following day. The upper parts of Pollnagollum were passable via Baker's rift so they were explored in the afternoon. That evening it was discovered why chickens were so cheap. They weren't really gutted, Pete Ogden drew the longest straw. Euk! The pubs were shut as it was Good Friday.

On Saturday it was still raining. The only promising dive available seemed to be the terminal sump of Pollballygoonan (U.B.S.S. Q11). The small and insignificant entrance was almost full of water ("I'm sure it won't rain for a couple of hours"). This opened up into a typical T-shaped passage ending in a chamber full of water. Martin dived into this frothy cauldron of brown soup but probably got no further than most people do in drier weather.

On Sunday the floods were receding. A very wet Pollnagollum was descended via Gunman's cave but the bedding planes leading to Pollelva were impassable. At a couple of places the route was difficult to find because of the high water. The uphill trip out was quite sporting against the force of the stream. Watching the water swirl around the big meanders was fascinating and it is probable that few have had the pleasure of seeing the cave in such an active condition.

That afternoon a tour was made of the local sights ("Hey, stop climbing my castle"), including the Cliffs of Moher. There were two blokes trying to reconnoitre a climb although they were probably so drunk that they imagined the green, slimy crumbling rock was Yosemite Granite.

Monday was a fine day to visit Doolin Cave. After laddering Fisher Street Pot ("I can't see any water"), Pete, Paddy and Martyn cursed the new sunshine in the wet-suited walk to the Catherine's I entrance. The entrance was a crawl leading to a passage cut through

flaggy limestone. The centre part of the cave was a meandering canyon with occasional chambers. The meanders varied considerably from tight hairpins, through very slow, to almost dead straight. At a few low places with little air space there was evidence that the cave had been sumped to the roof in the preceding days. Two roof level waterfall inlets at the lower end smelt of Jeyes fluid! Helmets scraping the roof they swam through the bedding plane to the bottom of Fisher Street Pot thankful that the water was just low enough to allow a through trip. A downstream trip was made to see the wide and low terminal sump which can't be more than a few feet above sea level.

Paddy went to pack the car while Peter and Martyn explored Poll-i-onion, which had a small entrance passage ending in a large chamber. This contained a huge stalactite, the only exciting thing about the whole cave. A smaller chamber beyond led to a low phreatic passage. Attempts were made to climb a slimy aven; the soft floor proved a godsend. The cave can be summarized as a sort of Irish Llethrid.

That afternoon the expedition moved on to County Fermanagh. After dark there was little other traffic on the road but every passing car proved to be a major hazard as it would invariably be in the middle of the road with no dipped headlights.

Daylight on Tuesday showed the party had arrived at Puckoon the cottage of the Rayfad Group near Black Lion. Billy, a Rayfad caver led a tour of the locality. There were plenty of caves but little written information on what had or hadn't been pushed. Marble Arch had been thoroughly explored but most of the others had potential digging or diving sites.

In the evening Paddy, Peter, and Martyn went into Marble Arch and now hold the record for time lost in the entrance boulders. The stream was in flood and a rope had to be used to get across the torrent where the water entered from Skreen Hill. It proved impossible to get further upstream than a low arch in the main passage, despite attempts to claw along the wall.

Dick Thomas and Eleanor Mitchell joined Billy and the South Wales four on Wednesday for a look at Tully hona rising. This was a promising diving site although the known cave was not very long. A tight "S" bend a few yards from daylight led to 200ft of low stream passage. A tight wet hole gave entry to a chamber 70ft long ending in a sump. This was dived by Martyn who returned almost immediately to say that the sump was only a duck. Peter followed him through while the others turned round to survey back to the entrance. Beyond the duck was a wide low passage which opened up into a stream passage about 15ft high. About 500ft from the duck the streamway ended in a 15ft waterfall which fell from a pool fed by a sump. By the side of the pool was a large amount of banger wire. It looked as though someone had tried to lower the water level of the pool by blasting the lip off the waterfall. This meant that what was assumed to be new passage was already known, but not recorded. The prospects for diving the sump were excellent. Paddy and Sue had finished surveying and helped to carry the diving gear out.

The next morning Martyn dived Shannon Pot. This wasn't a pot but a pond surrounded by trees at the edge of a boggy valley. A peat coloured stream flowing from one side was the only proof of it being a resurgence.

In the afternoon Peter, Martyn, Paddy and Sue portered the diving gear to the Tallyhona sump. After watching Martyn dive, Paddy and Sue set off to survey back to the duck. Martyn returned after an hour with verbose tales of caverns measureless to man. The surveyors returned just as Martyn was encoring the dive on the pretext of recovering a line reel. After

listening to Martyn's description of 3000ft of new passage it took an hour to porter the gear out through 700ft of cave.

On Friday the ground behind Tullyhona was explored, to look at the sinks and also to attempt Chicken Pot which had not previously been descended. One of the two sinks was near a farm above the rising, and the second was at Whiskey Hole (also called Westminster Cave by those from Westminster). Martyn was sure by the nature of the two sites and the distance between them that the two passages he had found terminated very close to the sinks.

Nearby was Chicken Pot which Pete Ogden "volunteered" to attempt. A single ladder and 100ft lifeline were used. After a restricted entrance the pot spiralled down to end in a 6inch wide rift filled with cobbles going down at 45°. The total depth was 45ft. The whole pot was running with water despite there being no definite watercourse. The Sandy Limestone was being actively eaten away, leaving many tall spikes and razor edges.

Martyn had to catch a bus from Enniskillen which provided a good excuse for a run into Northern Ireland. There had been a bomb blast a week before and the townsfolk were very jittery compared with the relaxed country dwellers on both sides of the border.

The caving was over and considering the weather everyone was quite pleased with the week's effort. Plenty of scope for further work had been found in Fermanagh and new friends made on both sides of the border. The message from both sides of the border is: "Don't worry about the troubles in the cities, you're welcome one and all".

P. OGDEN

Since this article was written, it is understood that the troubles in the Border areas have hotted up and it is now strongly advised that caving in the Fermanagh area is too dangerous.

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Tel: 3286

RHINOCEROS REMAINS IN FLINTSHIRE CAVE

On 17th April I had occasion to pay a visit to the well-known Ffynnon Beuno and Cae Gwyn Caves.

These two caves are close together but do not connect, and they yielded a wealth of animal remains when excavated by Hicks and Hughes in the period 1886-8. The finds are now scattered far and wide, but I have been able to view those held by the owner of Ffynnon Beuno, Mr A.D.H. Pennant, and the collection at the Zoology Department of the University College of North Wales, Bangor.

It was widely believed that both caves had been cleared out in the last century and indeed Cae Gwyn is bare. But in Ffynnon Beuno I discovered that part of the original talus cone at the foot of the shaft inside the cave still remained. The cave earth on the floor had obviously been disturbed but I was able to excavate a small trench into undisturbed deposits. In the zone between 4 and 12 inches depth there were bone fragments; I was able to recover one end of a tibia, and a tooth which I identified as rhinoceros. Photographs were taken of the section. With these remains I found a flint fragment smoothed by water action. The matrix of the finds was a mixture of small pebbles (largely from rock outside the cave), brown, sandy clay, broken sheets of stalagmite, and isolated lumps of sticky, red clay. In other words boulder-clay of glacial origin, and the turmoil of the melt-waters would account for the broken stalagmite, and the fragmentary character of the rhinoceros tooth.

Dr C.B.M. McBurney has said that the Aurignacian implements from these two caves are "of exceptional interest both typologically and from the point of view of geological dating". (See 'Prehistoric and Early Wales', published 1965 by Routledge and Kegan Paul).

It must be added that we have a radiocarbon date on material from this site. Professor Shotton of the Geology Department, Birmingham University, has dated a carpal of mammoth from one of the two caves (it is not clear which one, but the specimen came from Mr Pennant's collection) for a research worker, Mr B.M. Rowlands. The date obtained was

Age B.P. 18,000 years $\begin{matrix} +1,400 \\ -1,200 \end{matrix}$

This figure, of course, is in good agreement with the "Red Lady" of Paviland (18,460 years B.P.), which was a human burial in association with mammoth bone and Aurignacian artifacts.

Thus there is a case for a new, modern excavation at the Ffynnon Beuno Cave, and the results could provide further information about the Aurignacian occupation, and the more obscure events in the Weichselian Glaciation of that area.

References.

1. Kenneth P. Oakley, 'Radiocarbon Dating of Proto-Solutrean in Wales', Nature, Vol.231, May 14, 1971.
2. B.M. Rowlands, Nature Physical Science, Vol.230, (1971), 9.
3. Kenneth P. Oakley, Antiquity, Vol.42, (1968), 306.

MELVYN DAVIES

27 April 1972

OGOF GARREG HIR - A NEW CAVE ARCHAEOLOGICAL SITE IN PEMBROKESHIRE

On 11th August 1972 Peter Wilkins and I were searching for a cave we had spotted from a boat the previous year in the sea cliffs 100 yds east of Mewsford Point near Castlemartin, Pembrokeshire. We failed in our project but came across another cave which has now become the fourth site to provide prehistoric animal remains in the magnificent section of coast between St Govan's Head and Linney Head.

The cave has a small entrance only 4ft high by 1½ to 2ft wide, which lies 60ft down the near-vertical cliff face which approaches 140ft high at this point. The NGR is SR/9428.9387. The visible entrance is the remnant of a once bigger passage, and it has "dead" stalagmite now much eroded by sea-spray. The ledge on the east side, reached by a rope climb down a gully, forms the only access to the cave, and even this is 1ft higher than the top of the entrance.

A short excavation was carried out immediately in the soft loam at the cave entrance. Bones were found at 4 inches depth, at 8 in., and further in, at 12 in. Photographs were taken of the main bones in situ and later in close-up.

The stalagmite must originally have reached to within 9 in. of the peak of the cave roof, but it is not yet known whether the excavated material was, at one time, covered by this stalagmite. The tibia fragment which was discovered tucked against the west wall may have been pushed there, perhaps by an animal. It could not have been washed in because the deposit is too loose and friable. From evidence in a neighbouring cave (Ogof Morfran) we can say that spray from the sea would reach this cave, and leaching of the deposits has therefore occurred. This was not extensive since compact pieces of charcoal were found with the bones.

The cave can be seen to extend inwards for at least 10 ft, but it was not entered to avoid disturbing the surface deposits, and only 1ft of the loam has been taken out at the entrance. The tibia fragment would appear to have been broken by human agency to extract the marrow. The difficulties of access today need bear no relationship to access in prehistoric times: we have found pottery in caves nearby which are now only accessible by wire ladder.

This cave, like its three companions, is situated on the Castle-martin Tank Firing Range. Access is controlled by the Camp Commandant and is only possible when exercises are not taking place. The Pembrokeshire County Curator is also involved in the issue of permits to visit the caves.

Footnote: The bones have been identified by Mr J.A. Bateman, Keeper of Zoology, National Museum of Wales. They are of Ox, sheep and unidentified birds. Excavation will now be continued this Autumn.

Melvyn Davies, 2nd September 1972. The Nature Conservancy, Bangor.

APPENDIX

IDENTIFICATION OF BONES FROM OGOR GARREG HIR, PEMBROKESHIRE

This cave is situated at SR/9428.9387 in a 140ft high sea cliff on the Castlemartin Firing Range. It was discovered and the entrance briefly excavated on 11th August 1972. Mr J.A. Bateman, Keeper of the Department of Zoology has kindly identified the fragments of bone at the National Museum of Wales, Cardiff.

From 4 to 8 inches depth (with fragments of charcoal):

Vertebra fragment	Ox
Distal fragment of Tibia	Ox (small breed)
Skull fragment	Possibly Ox
Carpal	Sheep / Goat
Scapula fragment	Sheep / Goat
Tibia of a bird	(About dove size)

From 12 inches depth:

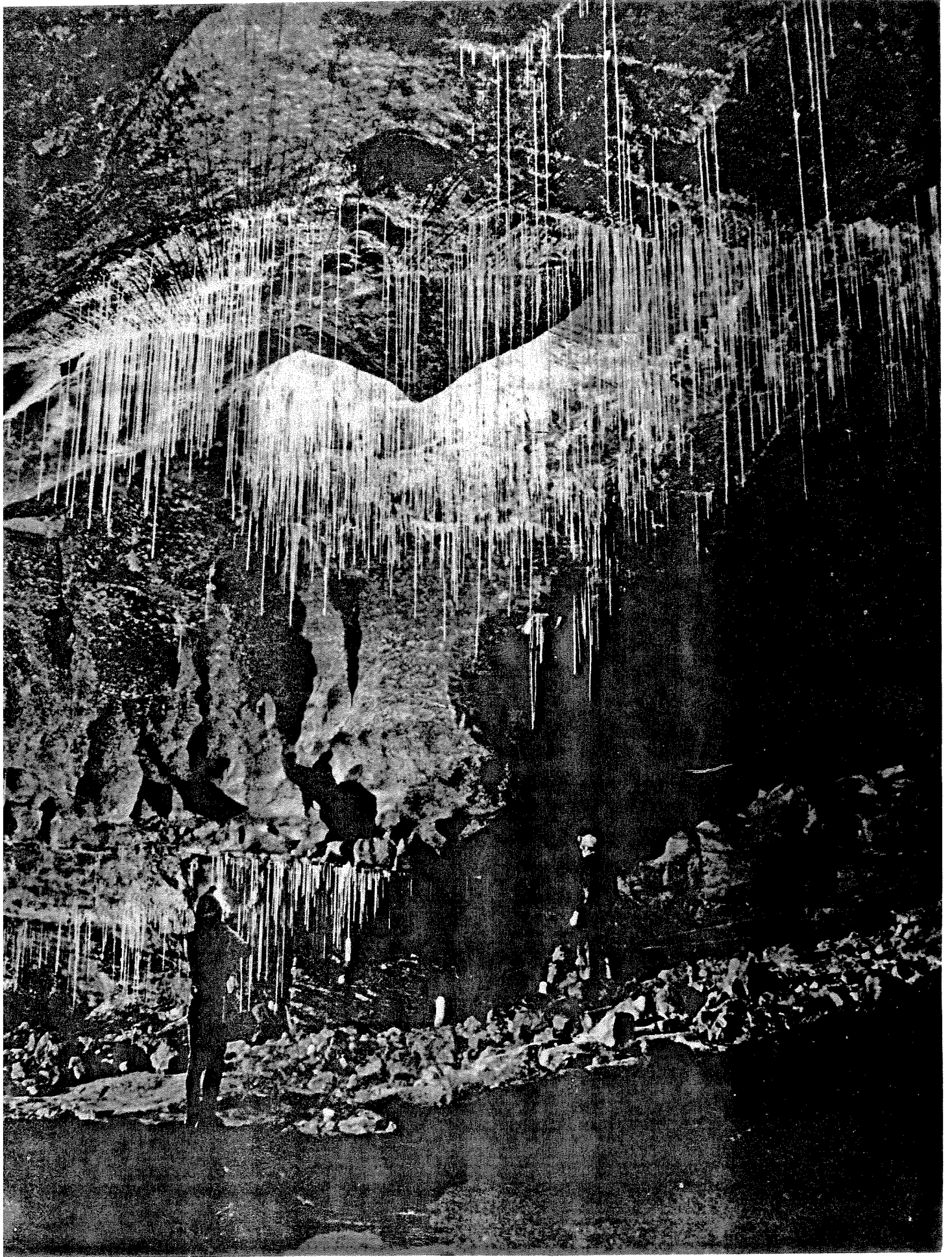
Distal fragment of tibia	Sheep / Goat
Rib fragment	Sheep / Goat
Rib fragment	Sheep / Goat
Longbone	Hare
Bird Tibia fragment	(About Jackdaw size)

MELVYN DAVIES
29.9.1972

C.R.G. Southern General Meeting, 1973

The Club has been asked to arrange the venue for the meeting on Saturday, April 7th, 1973. Members are asked to keep this date free to attend the meeting. Details will be circulated nearer the date of the meeting.

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Cloud Chamber, Dan-yr-Ogof, taken by Frank Honey.

OGOF DULAS

A CAVE ON THE CEFN-YR-OGOF SITE OF SPECIAL SCIENTIFIC INTEREST

The cave is situated on the west side of a hill known as Cefn-yr-Ogof at SH/913.775 in Denbighshire. It is mentioned in the Geological Memoirs, in "British Mining" by Robert Hunt (1887), and was first described in the caving literature by P. Wild (1948). An exploration was recorded by A.W. Ashwell in 1959, but the cave is omitted from "Caves in Wales and the Marches".

As the cave is of considerable geological interest and holds a promise of possible extensions, it has been investigated in detail. This report is of a preliminary nature as the best digging sites have not yet been determined. A survey will be carried out when exploration of the mine workings leading off from the cave has been completed.

The entrance was originally a roughly circular tube 10ft in diameter. This became blocked to within 4ft of the roof, but miners cut a tunnel underneath this deposit, and continued their "adit" inwards through the clay in the cave. They removed 5ft of clay in places and stacked it neatly against the sides of the passage. Rock was blasted out where necessary. The passage continues in this fashion for almost 200 yards to a natural chamber. The route is then blocked by what Wild assumed were miners' "deads", but it is in fact an ancient, natural roof fall. The miners tried to pass this by clearing a continuation of the fall which can be found in an aven in the roof of the chamber. They gave up after about 10ft.

About half way down the main passage there is a shaft in the floor 8ft deep which leads to an extensive system of mined galleries. Neither Wild nor Ashwell seem to have explored these galleries, and Smith (1961) suggests that they may lead to an extension of the cave. Our explorations are not complete in this area, but it is significant that a strong current of air emerges from the workings into the cave.

Work done during visits by the North Wales Caving Association on 27th August and 3rd September has revealed the following:

Scallop markings on the cave wall indicate an inward direction of flow for vadose water that appeared late in the life of the cave. This flow must pre-date the formation of the present Dulas Valley at the mouth of the cave because of the necessity for a catchment to supply such a flow. The whole cave slopes downwards into the hill and the miners made use of this fact to drain unwanted water eastwards into the terminal chamber. During a sunny day (3-9-72) when the outside shade temperature was 65 deg. F, the strong draught emerging from the cave entrance was at 48 deg. F. Probably two-thirds of this flow was emanating from the mined shaft, and the remainder through the roof-fall in the Terminal chamber. Bat guano has been seen in many parts of the mined area, and it is well known that Lesser Horseshoe bats hibernate in caves or mines which contain a thermally-controlled air current.

References

- Wild, P., British Caver, Vol.18, 1948, p.68.
Ashwell, A.W., British Caver, Vol.32, 1959, pp.62-63.
Smith, P., (Editor), Bulletin No.1, Derbyshire Caving Club, 1961, pp.15-6.

Melvyn Davies, 3rd September 1972. The Nature Conservancy, Bangor.

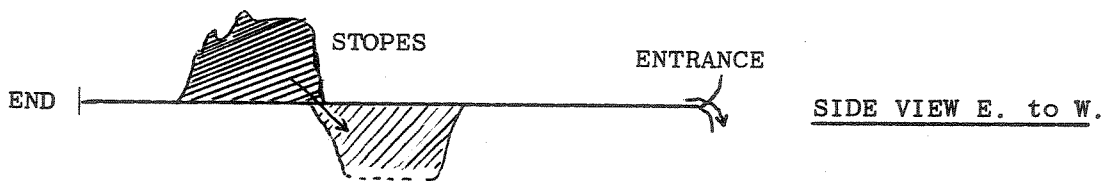
A VISIT TO THE COPPER MINES AT CWM DYLI, SNOWDON NATIONAL NATURE RESERVE

23rd September 1972

In view of recent public interest (ref.1) and official interest (ref.2) in old copper mines, and possible new mining sites, it was thought that a visit to this disused mine, last worked in 1915, might provide useful and timely information.

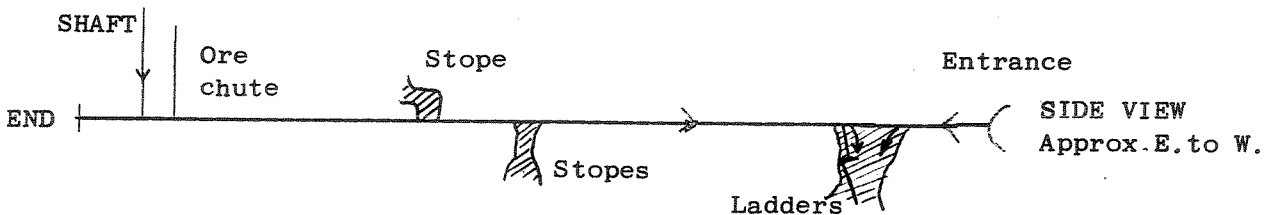
The mines were visited with the Warden S.H. Rees and a climber from Caernarvon, Mr A. Taylor. Photographs were taken at the entrances to some of the 8 levels shown in a recently-published plan (ref.3). Not all the levels are still open; it is believed that there are 2, perhaps 3, blocked by the falling away of waste from higher tips.

2 levels were explored with the aid of lights and a rope. The following is a line diagram of level no.2 (?)



The water (arrowed), shown emerging is laden with dissolved minerals in addition to copper salts, and blue crystals of ore were seen in this level. Further in a copious flow of copper-laden water emerges from upper workings, and falls into lower workings, to emerge from a lower level, and thence flow to the lakes Glaslyn and Llyn Llydaw, both on the Nature Reserve.

Level no.4 (?) was a long one, and it was found to be almost dry:



The draught pattern is of interest in this one, and this is the circulation prevailing only when it is a warm day outside. The arrows indicate strong draughts entering thus:

- (a) a cold draught from higher workings;
- (b) a "warm draught" going in at the entrance.

These two air currents combine to descend a stope (a type of wide working on the vein) to lower workings. This stope contained 2 old wooden ladders with iron rungs, but when a descent was attempted rungs began to pull out of the rotten wood, and it was abandoned.

The uppermost stope opens to the surface as a vertical-sided shaft about 50ft deep. Unfortunately this is alongside the PYG track to the top of Snowdon, and it is unfenced. Thus it presents a considerable danger to unwary hikers.

Further explorations are planned with speleological assistance and it should then be possible to make a survey of the workings if this were thought necessary.

These mines, at SH.617.547, are relatively inaccessible because they demand a walk of $2\frac{1}{2}$ miles from Pen-y-Pass, 1,169ft, to the shores of Glaslyn, 1,971ft. The upper workings reach an altitude of about 2,500ft. It is advisable to procure a permit beforehand from the Nature Conservancy, Penrhos Road, Bangor, Caernarfonshire.

References

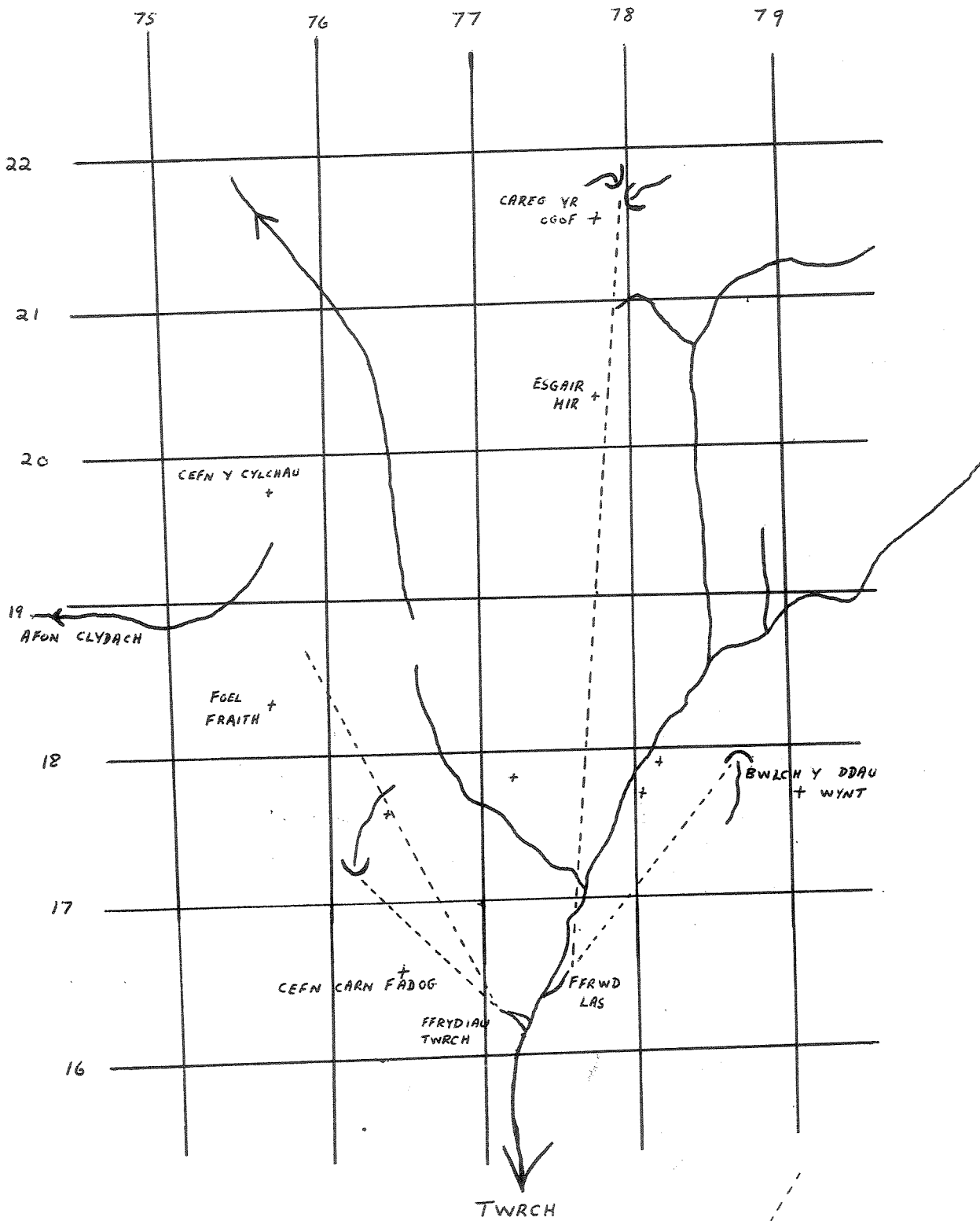
- (1) "Copper Mining in Snowdonia would gouge out giant crater in hills", Western Mail, Thursday, September 14th, 1972.
- (2) Report of the Commission on Mining and the Environment, London, September 1972.
- (3) Beck, N.C., A brief account of the Copper Mines in Cwm Dyli, Snowdonia, Trans. Caern. Hist. Soc. Vol.31, 1970, pp.46-63.

MELVYN DAVIES
Nature Conservancy
Penmaenmawr

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Porth_yr_Ogof

At the end of June, 1972, a large quantity of rock fell near the river entrance, blocking part of the path. Several more tons of rock seem about to collapse at any moment and members are asked to be particularly careful if visiting that area.



O S MAPS 1" 153 AND 140

POSTULATED UNDERGROUND DRAINAGE

THE TWRCH

The Twrch represents as big a challenge to the caver today as did the Tawe fifty years ago. The river gorge cutting through the limestone of the northern outcrop is one of the most beautiful in Britain, and contains in its floor two very large springs.

However, the structure of the area is complicated by severe faulting, and by the change of drainage from a pre-glacial N-S to a post-glacial NE-SW direction. As a result, neither spring is diggable, and their sources remain obscure.

Ffryddiau Twrch

on the west side rises from an unpromising boulder scree that is continually collapsing. The catchment area for this must be very extensive, probably extending to the sink on the Brynamman-Llangadog road 732186. There is an obvious sink at Cefn Carn Fadog in silaceous sand similar to that of the Byfre, but this sink supplies less than a tenth of the spring's output.

The probable origin of the underground system was Afon Clydach, draining south from Cefn y Cylchau. Evidence for this is afforded by several tubes in the rock face of Blaen y Cylchau. Several of them contain a slight draught, and just above the face is a promising collapse shakehole.

It is possible that there may be a communication between Ogof Pwll Swnd, probably formed by glacial melt water, and this postulated system.

Ffrwd Las

on the east side is even larger. In dry weather this spring can be seen to rise from a wide crevice in a tiny isolated patch of limestone. A lot of water sinks in the limestone to the east, but all of this probably drains to Dan yr Ogof, with the exception of the small sink in Bwlch y Ddau Wynt.

There remains a great deal of water that must come from somewhere. One possible source is the upper part of the Twrch, where it runs on limestone. Some water looks to have sunk there in the past, but probably none now. The other possibility is the large block of limestone at Carreg yr Ogof. Two small streams sink here at 779217 and 781216. Both look quite easy digs, and a dye test would resolve the matter.

If this line of drainage were to prove correct, it would pass underneath the present course of the Twrch, as does the Alum Pot water under the Ribble.

The Ffryddiau Twrch system has a potential of one a half miles by six hundred feet vertically, and the Ffrwd Las one of two and a half miles by eight hundred feet.

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COED Y-RHAIADR - ACCESS TO 'THE CHASMS' - Y WERN
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Permission has been granted for members of the South Wales Caving Club to enter Forestry Commission land in the above locality for the purpose of exploring the depressions subject to the following conditions:-

1. The Club will obtain any necessary permissions from neighbours or others who have an interest in the area. In particular, the Nature Conservancy and County Planning Officer's comments will be obtained, and acted upon, before any excavation with explosives is carried out.
2. Vehicular access will be allowed only on those occasions when carriage of heavy equipment to site makes it necessary.
3. The Club will insert its own lock in the entrance gate fastening, of a type and in a manner, to be approved by the Head Forester.
4. The Head Forester will be informed on each occasion before this permission is exercised.
5. The Club is permitted to enter the land and carry out its investigations entirely at its own risk on the condition that they will have no claim whatsoever against the Forestry Commission for any loss, damage, or injury howsoever suffered or caused.
6. The Club will do its best to protect Forestry Commission plantations and property, and will be held liable for any damage, loss or injury (arising out of the exercise of this permit) caused to the Forestry Commission or any other party or person.
7. This permission may be terminated at any time without notice, and expires on 31 December 1972.
8. A fee will not be charged for this permission, for so long as the Forestry Commission judges that the exploration has scientific value.

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NATIONAL CAVING ASSOCIATION

The National Caving Association has now been accepted by the Sports Council as a properly constituted body representing the sport of caving on a national basis.

The principles fundamental to the policies of the NCA are:

1. Maintaining the autonomy of constituent organisations;
2. Recognising that there is more to caving than just a physical recreation.
3. Conservation of caves.
4. Improving standards within the established framework of the sport, rather than encouraging expansion in terms of the numbers participating.

The Hon. Secretary is Mrs J.E. Potts, 3 Greenway, Hulland Ward, Derby DE6 3FE.

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ANYONE VISITING AN AREA OTHER THAN SOUTH WALES, FOR CAVING, SHOULD FIRST ASCERTAIN THE CORRECT ACCESS PROCEDURES. A LIST OF ADDRESSES IS ON DISPLAY AT THE HEADQUARTERS.

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CLUB NOTES

1. We welcome the following new members since the A.G.M.:

John A. Davies, 37a Vaughan Road, Harrow, Middlesex.
John A. Dearden, 1 Kemble Street, Brynmill, Swansea.
Andy Freem, 79 Dillottford Avenue, Coventry, CV3 5DS.
Pete Hall, 133 Sunny Gardens Road, Hendon, London, NW4 1SH.
Ron H. Jones, 5 Longview Road, The Holt, near Prescot, Liverpool.
A.F. Levett, c/o Post Graduate Department of Physics, University of Wales,
Bangor.

Angela H. Mills, 32 Putney Hill, Putney, London, SW15.
John E. Smith, 250 Wolverhampton Road, Sedgley, Dudley, Worcs., DY3 1RD.
M.J. Stevens, 65 Dan y Graig, Pant Mawr, Cardiff.
Geoff and Lynne Turner, 83 Evercreech Road, Whitchurch, Bristol, BS14 9RD.
Nigel Yarwood, The Frith, 20 Plymouth Road, Barn Green, Birmingham, 45.

2. Address changes:

Dr E. Aslett - somewhere in Cardiff.
Hywel Ball, c/o 'Bronderi', Peniel Green, Llansamlet, Swansea.
Bruce and Jane Foster, c/o The Gwyn Arms, Pen-y-cae, Abercrave, Swansea.
Harvey Lomas, 151 Hill Lane, Blackley, Manchester, 9.
Dave McGill, 9 Cwmdonkin Drive, Uplands, Swansea, SA2 OR A.
Paddy and Sue O'Reilly, 'Llethrid', 18 Greenogue, Rathcoole, Co. Dublin, Eire.
Clive Perrett, c/o 8 Kelso Close, Worthing, Sussex. (Actually abroad.)
Dr A.C. Price, Greenways, 1 Fayre Oakes Drive, Hereford.
Jem and Terry Rowland, Solid State Electronics Group, U.M.I.S.T., Manchester, M60 1QD.
Paul and Barbara Tedd, 2 Hillside, Welwyn Garden City, Herts.

3. Amendments to the address list in the last Newsletter:

Add: Neil G. Anderson, 15 The Parade, Whitchurch, Cardiff, CF4 2EF.
John E.L. Clements, 3 Watling Knowle, Radlett, Herts.
David and Pamela Dilly, 19 Preston House, Paddock, Walsall, Staffs.
Ron G. Egan, 10 Blakewall Gardens, Tweedmouth, Berwick-on-Tweed, Northumberland.
Mr and Mrs L.S. Galpin, 6 Trinity Rise, Tillington, Stafford.
Claire Harvey, 5 Castle Drive, Dinas Powis, Glam.
S.W.S. McCreddie, 8 St Marks Court, Cambridge.
Margery E. Railton, 12 Chester Road North, Sutton Coldfield, Warwickshire.

Delete: Mr and Mrs. G. Genin; Miss P. Hardwidge;
P. Millett; R. Morgan; J.O. Myers;
J.L. Murr; G.O. Thomas.

Club Notes (continued)

4. Points to note from the A.G.M. Easter, 1972:
The following constitution changes were agreed:
Add item 6e to read: 'The Committee shall appoint a
Conservation Officer.'
Add item 8c to read: 'The Financial Year shall end on 31st January.'
5. Disposal of rubbish at the Headquarters:
Please dispose of all rubbish at the Headquarters by using the incinerator.
First clear the incinerator of the burnt rubbish from last time, then
burn your rubbish.
6. Pant Mawr
We have been asked to state that NO VEHICLE is allowed on Pant
Mawr without prior permission being obtained from Mr David Lloyd,
the managing director of Cnewr Estates. Mr Lloyd has said this
will not apply in the case of an emergency.
7. Discount on caving equipment
A 5% discount is allowed to personal shoppers at Capstan House, Swansea,
provided that proof of membership is shown at the time of the purchase.
A discount is available to postal shoppers at Sub-Aqua products,
provided the order is sent in on club notepaper.
8. Coed-y-Rhaiadr, Access to 'The Chasms' - Y Wern.
An agreement has been reached for the remainder of 1972 with the
Forestry Commission concerning digging at the Chasms. It is most
important that this agreement is kept and a copy is displayed on
the noticeboard at the Headquarters. There is also a copy on
page 26 of this newsletter.
9. Leaders for Ogof Ffynnon Ddu I
The following have been accepted as club leaders:
Nigel Ellis; Martyn Farr; John Gillett; Frank Honey; Brian Jopling;
Dave McGill; Paul Tedd; Jill Stevens.
10. Congratulations to:
Marge and Brian Jopling, on the birth of their first child, Hywel,
on 16th October, 1972.
Robert Radcliffe and Angela Mills on their marriage on 30th September
1972.
Carl Ryan and his wife on the birth of their son.
Dot and Idris Williams, on the birth of their first child, Hywel David,
on 6th September, 1972.
11. Suunto Compass and Clinometer:
This was noticed to be missing in May. Will anyone who has used it
please contact the Equipment Officer, Pete Cardy.

Club Notes (continued)

12. Pete Cardy has a limited supply of metal vents for Nife cells, for sale to members, price 10p each.
13. The bolt shears which had been converted for ferruling are missing, first noticed missing about 16th September.
14. Club Records:
The following have been bought for the Club records recently:
'Lead Mining in Wales', 'Metal Mines in South Wales', and some aerial photographs of the Swansea Valley.
The Museum of Wales, Cardiff, cannot, at the present time, hold our records for us.
Books belonging to the Club should not be left lying around the Headquarters, they should be returned to the Records Officer.
15. Members with explosives certificates are requested by the police not to leave detonators lying around. Some children in Yorkshire found some and one child suffered injury when they played with the detonators.
16. The Annual General Meeting for 1973 will be held at the Abercrave Church Hall, on Easter Sunday, 22nd April, 1973, beginning at 5.00 p.m.
17. Members will be sorry to hear of the death, in September of last year, of one of our members, Brian Pickering.

FROM THE LOGBOOK

Most of the activity over the last months has been in Dan-yr-Ogof on diving trips. Success has at last been achieved in "Mazeways" but this has been adequately covered elsewhere.

Very little has been happening in Ogof Ffynnon Ddu. In December the sump at the bottom of Pwll Twll was investigated, but found to be choked. Some dry passages were entered, however, about thirty feet above the floor of Pwll Twll. They were about 650ft in length. A dive was later made from this extension which proved to be Oxygen pot.

In Ogof Ffynnon Ddu I, a dig has been started, in the Railton Wilde Series, but has not yet produced any results. Survey work has continued throughout the system and spot heights have now been added. For those interested, they have been marked in on the survey in the Common Room.

The through trip from Ogof Ffynnon Ddu I has become very popular and as a result there have been an increased number of rescue alerts, due to late parties - the main reasons being people getting lost and rising water making the boulder chamber area hazardous.

During the summer, the water level in the sump in Pant Mawr was very low. In fact, there was an extra 100ft of passage, and a very tight squeeze (too tight for divers) was passed. The sump was then dived for 100 feet, passage size becoming larger. Some dives have also been made in Ogof Cas for 230ft., but progress has been held up by unstable boulders:- Is this the flood rising of Pant Mawr?

Also during the summer the "Chasm" was dug persistently over several months. A great deal of enthusiasm was put into the dig, but as yet a breakthrough has not been made. So far a shaft has been sunk about 25ft at the bottom of the cliff face, following the wall down. Progress slowed down considerably when the shaft dog-legged. The bottom of the shaft needs stabilising - to say the least.

Hospital cave has been dived again to the final choke, which was dug. The choke was passed to find Sump 8! This was dived a few weeks later, but progress was halted by an underwater sand choke which was dug without success.

A new cave has been found in Barland Quarry on Gower. It is about 1400 feet long and has been described as tight, wet and muddy.

In Ogof Agen Allwedd, a further dive has been made to the Turkey Sump extensions. Some new passages were entered, beyond Sump V, and a very unstable climb made. A promising high level chamber remains to be entered. There is now about 3000 feet of passage beyond Sump V.