

SOUTH WALES CAVING CLUB NEWSLETTER

NUMBER 40

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JUNE 1962.

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1. ANNUAL GENERAL MEETING
Held at H.Q. Penwyllt, Easter Sunday 1962.

ELECTION OF OFFICERS AND COMMITTEE FOR 1962.

- President. Brig. E.A. Glennie, C.I.E., D.S.O.
- Vice-Presidents. Mr. A.H. Hill
Dr. D.A. Bassett, B.Sc., Ph.D., F.G.S.
Mr. D.W. Jenkins.
- Chairman. Dr. E. Aslett.
- Hon. Members. T. Ashwell Morgan, Dr. A.J.R. Hudson, C. Powell, Mr. & Mrs. J. Barrows,
Mrs. G. Price, G. Platten, Dr. Dorothy Nichols, C. L. Railton.
- Hon. Secretary. C. Jones.
- Hon. Assistant Secretary C. Owen George.



1. The first part of the document discusses the importance of maintaining accurate records. It emphasizes that proper record-keeping is essential for ensuring the integrity and reliability of the data collected. This section also highlights the need for regular audits and updates to the records to reflect any changes or corrections.

2. The second part of the document focuses on the methods used for data collection. It describes various techniques, including direct observation, interviews, and the use of specialized equipment. Each method is evaluated based on its strengths and limitations, providing a comprehensive overview of the data gathering process.

3. The third part of the document addresses the challenges associated with data analysis. It discusses the complexity of large datasets and the need for advanced statistical tools and software. The text also touches upon the importance of data cleaning and validation to ensure that the analysis is based on accurate and complete information.

4. The final part of the document concludes with a summary of the key findings and recommendations. It reiterates the importance of a systematic and transparent approach to data collection and analysis, and provides practical advice for future research projects.



The number of projects and digs tackled in these 5,200 hrs aren't sufficient to provide material for one newsletter, leave alone an annual report. The majority of members never go beyond the tourist trip stage, some tag along to an occasional dig and one or two have the initiative to push projects of their own. A number of people stay away from the H.Q. because there's little or no real activity there. If you want activity its up to you to come and start it. However all the time has not been wasted and some people have done a little caving.

The major discovery this year has been Tooth Cave on Gower. Patient digging by J. Harvey, R. Morgan and Satch has not only resulted in the finding of a most sporting cave system but also in the discovery of an important archeological site. I shan't dwell on what's been found, since the three Swansea lads and their tame archeologist have an exhibition of their finds for your benefit after this meeting.

The project that has aroused most interest is the re-entry to Tunnel Cave. Tunnel Cave, discovered by the club and now closed to us, has long been a thorn in our side. However thanks to a cave detecting device and the survey, the position of Cascade Aven in relation to the surface has been fixed and thanks again to Dingle and his machinery the shaft is almost completed. I'm certain that we can one day soon, with the aid of cave physics, find a back door to D.Y.O.

Cwm Dwr was attacked vigorously at the start of the year, but we were the victims of our own enthusiasm. Pushing on at the extremities instead of making sure of the shaft was bad tactics, but we learn by our mistakes and I'm sure that future shafts will be well shuttered before the more interesting part of the job is pursued.

Today, Bill Little discovered 400 ft of passage near Fault Chamber in Ffynnon Ddu. I must apologise to Bill, since when he started the job I called him a fool for digging in the dry series!

The cave divers were very active last summer when they pushed on in Ffynnon Ddu and explored White Lady Cave and Pwll Ddu in the Neath Valley. Unfortunately legal difficulties have prevented further diving operations.

The exaggeration factor is well known in caving circles and last summer a number of you fell foul to the Jones factor. 1,000 ft of ladder was manufactured and a journey to Yugoslavia was undertaken to explore a bottomless pit called the Tucic Ponor. Alas! in the two years heavy rain since the previous visit the hole had shrunk and instead of a record descent we potted down a pleasant little pit on the same scale as Pwll Ddwn. However all who went to Yugoslavia seem to have had a run for their money and the club has benefited by 700 ft. of ladder.

I must say I am disappointed that no trip to the continent caving has been planned for this year. The club has the equipment but the get up and go attitude is missing.

Every now and again during the year you will have observed a gathering in a small back room, and whilst the hands on Mrs. Price's clock have staggered around to 10 the affairs of the club have been managed by those elected to high office to do so. A number of people have enquired what our honorary selves do at committee meetings. It was decided some time ago to publish brief minutes of these meetings, but since the minutes have been anything but brief, I shunned the task. However some of the topics discussed were of general interest and for your information here is the break-down.

1. Cottage on Gower.

It was brought to our attention that a cottage on Gower near Llethryd and Tooth Cave was for sale and would make a suitable weekend abode for cavers interested in that area. After discussion it was decided not to bid for the place. The far sightedness and wisdom of the committee was borne out by a letter from a member interested in the cottage. It read - "Dear Clive, We have acquired the trailer in Llethryd Cwm, whilst the girl guides have the cottage. This is not a bad thing, as I've seen one and she is not the navy blue knickers and hockey stick type, but in fact a swinging chick ...etc. etc. Once we get the trailer in order, could we have some mattresses from the club?"

2. Quarry at Llethryd Cwm.

A quarry company applied to start work in Llethryd Cwm. The club and C.R.G. protested to the County Planning Office and permission was refused. However the persistent stone hewer appealed and a public enquiry had to be held. After a lengthy debate and even lengthier deliberations the Cwm was saved.

3. O.F.D. Leaders List.

A total of 18 new names were added to the list during the year. A number of these new leaders are not all that familiar with O.F.D. but were put on the list because they were considered to be competent and responsible cavers. This does lead to one problem, the one of protecting the smaller not so obvious formations. Leaders who are unaware of the location of these helictites should be extra careful with visiting parties to ensure that no damage is done.

4. Visiting Parties.

The Club put up with 32 visiting parties last year. Whilst this is an important source of revenue, it could get out of hand, so the first weekend of every month (and 5th, if any) and Bank Holidays have been reserved for members and members guests only.

5. Cave Science.

As you all probably know the back-room of No.10 has been set aside to be used as a laboratory for those members wishing to carry out

scientific work in caves. It was felt by some committee members that the archaeological work being done by Derrick Webley should get some support from the club in the form of a sub-committee. This didn't meet with the approval of the other cave scientists who came up with the following proposals:- A scientific sub-committee should be set up to act on its own initiative to

- a. foster the scientific study of caves.
- b. To assist members of S.W.C.C. in the pursuance of these studies.
- c. To act in an advisory capacity to the S.W.C.C. on scientific matters and cave preservation.
- d. To administer the laboratory.

Any funds which might be made available to the S.W.C.C. for scientific purposes should be administered as a separate account by the Hon. Treasurer in consultation with the Scientific Sub-Committee.

This idea was generally acceptable to the club committee who suggested that the sub-committee should be composed of 6 members, 3 scientific and 3 lay members and should at no time form a majority on the main committee.

Whilst on the subject of cave science it's appropriate to review what's been done in the past 12 months. If I miss anything out it's because I've not seen the results and anyone wishing to add to the list later please do so. The archaeological work at Tooth Cave I've already mentioned. The bulk of the work seems to have been more on the technological side. Norman Lloyd, Bill Birch., and Bill Clark's work on ladder making methods is of immense value and should be published this year. The most interesting work however has come from Bill Birchenough. His cave survey by radio is the outstanding development of the past 12 months. Survey work has started on the caves of the Neath Valley and a new survey of Cwm Dwr has been carried out, but we are still waiting for it to be drawn up.

To conclude the report I would like to suggest a future policy for this Club. We must be prepared to spend more of our money on caving. Time after time digs are abandoned for lack of suitable shuttering or the means of drilling shot-holes under-ground to make more effective use of explosives. We should, purchase a stack of material ready for use as shuttering whenever required and develop a drill which can be used conveniently by cavers. I mention digging first, as this is the most important aspect of this game we play. It's obvious that we must continue to find caves if we are to start finding out about caves. When we have the cash we must invest in survey equipment, climbing equipment, dinghies and all the requirements for cave exploration. Admittedly we have no great demand for some of these items at the moment, but their very existence at the H.Q. will encourage their use and they will be there for the use of members planning expeditions to the continental caving areas. Of course the big argument against all this is will members look after such equipment. On past experience the answer is NO. However this need not be the case. It requires only 10-15 minutes time of one member of each trip borrowing equipment to clean it and return it to its proper place.

We must invest more money and effort in caving, but we must not

neglect our investment in the H.Q. One or two working weekends per year will be essential to maintain the place and to carry out worth while modifications. But above all, members must come here with the intention of pursuing some project or other and not just to see what's going on. I just dont understand it, we'reⁱⁿ the most interesting caving area in the country as far as possible finds are concerned and we're doing practically nothing about it. All the equipment in the world won't get us into O.F.D.II nar the miles of cave between D.Y.O. and Sink-y-Giedd, but the equipment and a little 'hwyl' from members could work wonders in the next 12 months.

Clive Jones.

HON. CAVE RESCUE ORGANISER'S REPORT.

Rescue Personnel

There are now 108 members on the call out list, which requires revising for changes of address etc.

Rescues.

There was one official call-out during the past year to effect the rescue of a young caver trapped in Coed-yr-Mystwr cave. Regretfully we were unable to retrieve the young man alive. (See full account in N/L 37)

A stand by party of members was alerted when a party of students were long overdue from a trip in Agen Allwedd. On enquiries being made it was found the party had left the cave 12 hrs. previously to the alarm being raised. The party had neglected to inform their friends that they had returned safely. I'm sorry to add that those who had wasted both their time and money were not thanked for their efforts but more or less called stupid for their concern.

Members have assisted in the release of two trapped dogs during the year.

Rescue practices.

There have been 5 practices run by Area Wardens and teams composed of members in their areas. These were:-

The Swansea group in Foel Fawr led by W.E.Clarke.

The Swansea group in O.F.D. led by W.E.Clarke.

Weekend H.Q. party in Powell's Cave led by J.C. Jones.

South of England group in Will's Hole led by L.A. Hawes.

A stretcher Practice on the Cribarth in snow conditions using the Mountain Rescue's Thomas stretcher by the S.of England group.

First aid lectures arranged by Dr. R. Williams for the Cardiff area members resulted in 10 First Aid certificates - congratulations for a fine effort.

A series of impromptu films on rescue procedure and first aid were shown during the year. These were found to be most instructive.

Equipment.

<u>Cave rescue equipment obtained</u>	
200 ft. of hauling rope.	Rawl bolts.
Further supplies of food.	Carrying sacs for 1st Aid equipment.
A stock of miners helmets.	A carrying sheet.
Block and Chain.	

<u>Mountain rescue equipment supplied by the Mountain Rescue Cmte.</u>	
A Thomas stretcher and splint.	Sleeping bag.
Rucsac containing 1st Aid equipment.	Rucsac containing comforts.

All the medical equipment has been checked by Dr. R. Williams and found to be in good condition and sufficient in quantity.

Losses.

During the year one Nife Cell cap lamp found a new owner during the Coed-yr-Mystwr call-out.

Second Conference of C.R.O.'s

The conference was held at Bristol on the 30th September. Over 61 delegates and observers attended from Yorkshire, Derbyshire, Mendip, Devon, Hereford and S. Wales. The hosts were the Mendip C.R.O. It was suggested that South Wales held the next one and this matter is being explored.

Subjects discussed during the conference were:-
The problem of bad air in caves. Relations between the C.R.O.'s and the constabulary.
Call out arrangements and training of rescue teams.
London C.R.O. Irish C.R.O.

Various items of equipment were demonstrated after the lecture. On the following day a practice was held at a swimming baths with sumping apparatus at which the delegates took an active part.

During the past year definite progress has been made. The lay-out and package of medical equipment is more efficient. Members are forming themselves into separate area teams and knowledge of First Aid has increased. Unfortunately what is strong in one area is weak in another but it is hoped that this will be overcome.

Once more I thank all members for the full support they have given me during my year of office. I conclude by stressing the point that normal caving is insufficient practice for cave rescue.

G.L. Clissold.

HON. TACKLE MANAGER'S REPORT.

Fixed tackle in O.F.D. has been inspected and after a few repairs is now satisfactory. Several rawlbolts were taken out and looked at to see their state: they were found to be in good condition.

Three Nylon ropes and one ladder have been damaged and it is hoped that more care will be taken by members this year when we hope to buy more rope.

Bought.

6 Shovels (Long narrow)	700 ft. of ladder.
2 Ordinary shovels.	2 Rawl Bolts.
1 Lump Hammer.	Sundry handles for picks and hammers.

Things given.

1 Nylon rope	100 yds. of steel cable.
Sundry telephones and other useful objects.	

B. Birchenough.

2. SPELE*

It started the other day. I was getting to the point in my story of the Jugland trip where 900 feet of ladder were hanging down a bottomless pit, with brown bears around the mouth, shouting to the high white hills. The last man down had reached the first ladder join, when the links gave and he was left with his arms holding onto the top 20 ft with the rest of the 880 feet and ten men wrapped around his legs. The men below climbed out over him and the day was saved. The point of the story was to explain why his arms had got longer that summer. Someone suggested that if we had travelled ten feet down a four feet sewer we could have written a novel about it. Tales of misadventure they said, weak end tails of misadventure!

What is our public vision? What do they think of us, how do we project ourselves to outsiders? As we all know there are two divisions in the club (1) Speleologists, and (2) 'Spelers'. Since the latter activity is perhaps of more importance to the club than the former, it would perhaps, be a good thing to write a few notes for the more innocent members of group (1) on Spelemanship and outline some elementary rules and aspects of the public vision of the club.

The club should always be speled as the Club, or better The Caving Club, thus making a parallel with the Alpine Club, etc. The impression should always be given that there are no other clubs, that others who find their way into caves are fools, vandals, clots, irresponsible nits, barbarians

* pronounced 'Speel' Note also the circus term - Speiler = Barker.

or boy scouts. All cave paintings, litter, spent-out batteries are the responsibility of these others. Ours is a tidy club, neat and orderly and is to be speled as a group of whitemen, all tall, tweedy blokes with black or white hair and teeth - perfect specimens. All are Team members, chatting together arm in arm, or hands around shoulders fronting a backdrop of sheer horrible rockwalls. A vision has to be projected of shivering mothers worrying over their son's wellbeing and welfare. A Tweed places his large clean hand around her shoulders - "Dont worry, we'll get him out" - she immediately calms; no doubt exists for the safety of the son, only the moral future of the mother is ponderable.

The club members are also all geniuses of one sort or another. If you want a rocket, a new fangled chemical or a cure for a rare disease, they will make them for you. It is also quite obvious that the club for these people is not for sport alone; sport, speleologically, is second place to Science. All members are clever with their hands: bring a few old rusty bits of metal to the club on Friday evening and by Sunday they will have produced (self-sacrificing the weekend caving and working all night) a gleaming new thing - in fact, the thing you wanted. All own vintage cars, clean overalls and boots. All are terribly keen on culture, have beautiful tenor voices and sing leider to the locals in the tavern. The latter think the clean young men wonderful and patti them on the back after the singing. Girl members are equally strong, good looking and of course clean living. The Tweeds love animals and have dogs which faithfully congregate around their master's clothing (all folded neatly in the club). No dog makes water on the club floor; all use the Jeyes'-sodden telegraph pole at the back of the club.

The Clubhouse is a clean place, with large polished leather chairs near the roaring rocky fireplace in the common room. A neatly arranged pile of scientific journals with indices are filed away in the large clean cupboards. The food cooked in the kitchen is never greasy and only perhaps the exotically perfumed flavour of beans cooked in their jackets wanders through the corridors. In the hall, before the common room door near the barometer, a neat rack holds carpet slippers and pipes. The fireplace is composed of rare rocks brought back by the club from expeditions to foreign parts. The Club is always at an advantage when abroad because foreigners can't cave properly and use pitons which the Tweeds think funny and not very nice but rather indecent. All Tweeds are linguists, making themselves understood in all languages, especially pidged versions and thumb creaking methods of communication.

To present this picture to the outside world one must or need not be subtle. They are beaten from the start, since anyone who caves they say are either bold courageous hero(ine)s, or nits. The picture must be presented outrageously and honestly to achieve the first category.

Introducing the subject on a Monday morning to one's city friends is the first obstacle; a coil of wet rope flung into the corner of the office is eyecatching and a slump into a chair will usually do the trick. Mudstained boots are a good ploy. Another method is to take into one's confidence the most talkative of one's workmates and tell him the weekend's

exploits: refuse to discuss them with the denizens who come to hear about them from your own lips. This boomerang backspele is excellent. The image is projected of great silent activity and courageous firm friends going from the caves and hills to the towns like clams. Superspelific.

There comes a time when one is asked why you do it. The challenging 'because it's there' must be avoided at all costs. Obviously the answer must depend upon the interest of the individual, ranging from forefinger exercises to (for the geologist) 'it's not the rock but the holes' etc. One should always leave a split image, a mystery. Excellent of course, is the 'I do it to test myself' line (steely glint here). But never overdo it; spele slowly.

For the innocent, a few examples of picture heighteners i.e. spelebinders, might be described. At all times it is important to give a picture of improbable activity in a darkness that the rest of the community will never know until they enter the Great Wooden Sump for the first and last time.

Anyone who goes into the dark is daft, so the effect of a light failure is a desirable story starter. "Two miles underground and the battery went flat" - quite good as an introductory spele, but the way to get out - "shrieked like a bat man, and followed the echo's". Great stuff for old ladies! Photographic starters are obvious. Photographs taken without light for instance, need no enlargement. Opening cornbeef tins with banger is fair-game for lunchtime conversations - "I once found a detonator in my left molar". Also accounts of annual dinners held in off-beat caverns six miles underground, twice as big as the National Museum, is everyday stuff. Cave paintings are a must for the archeologist, especially those on the most improbable places - "100 feet up on a sheer rock wall is etched the Venus of Pant Mawr." The Welsh caves are full of these paintings. Phallic arrows everywhere, faces peering over walls, all are well known in the club; not so outside. Footmarks of bare dancing feet can hardly go wrong; for Tunnel Cave a picture of tribal ownership dances immediately springs to the mind. Tyre marks near the sump in Tooth Cave are obviously prehistoric, the last struggling splashes of a pinkeyewashed Turdigrade. Expeditions to foreign caves are good speling stuff. Fighting off Proteus from the sides of rubber boats, struggling with man eating Nymphagii in rock pools (ample opportunity of flashing teeth here). The Yugi bears (never seen) were a great help after the Potland trip.

Spelemanship with other cavers is more dicy, but more rewarding and worthwhile. There are some easy lines of approach to the problem; for instance, to someone about to go down a long dead sump-ending tunnel - "When you get through the sump, pick up my lighter will you" - or when he returns - "Which way did you come out". Excellent for visiting clubs to Pant Mawr - "Dont bother to take a ladder, it's hardly worth it." Length of membership can also be used with some effect against the young and active spelers. "Pre-Aslett when we - - - ." But perhaps best of all, the use of the newsletter, an excellent foil to fence with; especially against members who rarely visit the club, or on visits to other clubs.

"Have you seen my account of - - - ?" Then follows a complete record of someone else's work. This emphasises the importance of standing around on new digs, since the poor blokes digging are far too tired to write up their work. A few deft strokes of a biro and one can minimise their labour and project oneself as a feverish, fiendish leader forging ahead developing cave systems. Incidentally, action painting techniques (coloured paints on white and black gridded paper) produce excellent newly discovered cave systems. A wrist flicking action ten feet from one side produces a thrilling main stream passage; for section drawing, it is important to stand facing the grid, blobwise.

I hope it is clear that spelemanship is an activity, which although present in the club, no doubt, is unsung and its achievements never get recorded in this journal. Of course, one might have missed the whole point of the Newsletter and all the discoveries noted in previous issues are nothing more than Spelemanship in its most perfect form. One must accept that there is one cave in the Swansea Valley to start the club. Are all the rest fictitious or just extensions? From O.F.D.1 to O.F.D. 648. It would be nice to think so. Setting off from O.F.D. on Friday night and digging in Tooth Cave on Saturday (via Ogof Gwr of course). Perhaps in future the Newsletter might be divided into two; non-fiction and otherwise, or better still form a Sub-Committee for Spelers to have equal representation with cavers.

Derrick Webley.

3. THE FAULT SERIES

(Recently Discovered Passages in Ogof Ffynnon Ddu)

Well theretit was, a path going right past and worn smooth by hundreds of cavers during the last 15 years. Where Main Passage joins Flood Passage there is a chamber on the right which I have always known as Fault Chamber (O.F.D. Grid Ref: 4.4/D.8). On one side of this the fault is apparent in the wall above the hole leading to the Bedding-plane Crawls. On the other side of the chamber is a steep calcited "boulder" slope reaching to the roof from which came a trickling stream of water.

More recent examination suggested that this "wall" was infact a choked passage. Several days of blasting out the calcited blocks have now proved this to be so to the surprise of those who thought we were wasting our time.

On Easter Sunday, Neil Jones, Eric Inson and myself, blasted enough to squeeze into a space still so thick with smoke that we could not see our own feet. For a few minutes Eric and I groped about in turn whilst the other remained at the squeeze to guide ourselves back with our voices sounding strangely distant through the nitric fog. It was useless

trying to explore until the air cleared so we went off for a couple of hours and returned again.

The smoke had cleared sufficiently to see why we had not gone far before. In front the 10 ft. wide passage we had entered was choked by a steeply rising bank of clay and behind us the chaos of blocks we had squeezed through rose steeply back in the same direction from which we had come. We climbed up more calcited blocks, passing a curtain draped side passage, to find flat mud banks at the top of this slope. On the left the little stream had cut a trench and we walked along its calcited bed leaving the expanse of cracked mud flats undisturbed and watched over by two unusual stalagmites. Both are under a yard high, glittering white and erected upon circular cones of red mud.

The passage carried on, the roof still rising until some 30 ft. high: then the slope of floor deposits increased again and the passage ended suddenly at calcited blocks. We estimated the length of the passage at some 300/400 feet from where we started blasting in Fault Chamber, also estimating a total height of about 120 ft. above Flood Passage. The side passages visible by the mud flats became too tight after only a few feet. Opposite, a small passage had a floor of 'gours', at first dry, then wet. Some 30 ft. in was some 'cave ice' unfortunately broken and sunk in the cause of exploration but the next bend became tighter and we lost interest. Another side passage was explored when we returned to the curtains. My first impression was that we must be close to Pant Canol (another Cave to the North of this part of O.F.D.) but rather higher. A week later with the help of Neil Jones, Laurie Galpin and for some of the time, Bill Hughes we did a 'Grade 6' survey of the main parts (Grade 4 for the short side passages). We also named this passage Stairway Passage.

There's nothing like careful surveying for finding more cave. A ledge by the mud flats concealed a narrow little passage which we had not noticed before. After a few feet of narrow twists we crawled over some fallen blocks into a larger passage leading downwards again. Halfway down, a 'keyhole' passage on the left became choked. At the bottom another 'tube' passage also became mud choked. This latest extension which also went up again from the fallen blocks was christened the Back Stairs. Bill Birchenough found some snail shells amongst the 'boulders' at the top end of this passage.

There are no formations in the Back Stairs of any individual significance, but much of the walls have a sparkle of gypsum. There has not been any gypsum found in O.F.D. nearer than the RAWL series to my knowledge and perhaps this is significant. The height gained between Flood Passage and the upper ends of this new series must surely bring us up into the same beds of rock as those around the RAWL series. As yet I've seen no sign of any large shale band but perhaps the way leads upwards still further amongst the collapse or choke at the top of Stairway Passage. A rising shaft could perhaps be blown out here (I've already started) and we might find the RAWL shaleband.

Where did the passage come from? Not Pant Canol; Stairway

Passage is too high. But then we don't know where Phil's Parade (in Rawl Series) goes after becoming sand choked. Could they be one and the same passage? Then what lies between? because if it is the same passage it must belong to the oldest part of the O.F.D. Cave System. Except for the lower end of Stairway Passage and the almost separate Back Stairs, the passages are not on the Fault Line. A geologists opinions on this series would be interesting.

W.H. Little.

NOTE: REVISION OF O.F.D. PLAN

The surveying of the Fault Series in O.F.D. has prompted me to consider surveying various other small extensions not shown on Railton's published plan of the cave. Apart from Pant Canol, Bat Avon, Boulder Series and Coronation Series, would members please let me know about (or survey themselves) any 'uncharted' passage known (with O.F.D. grid reference to start please).

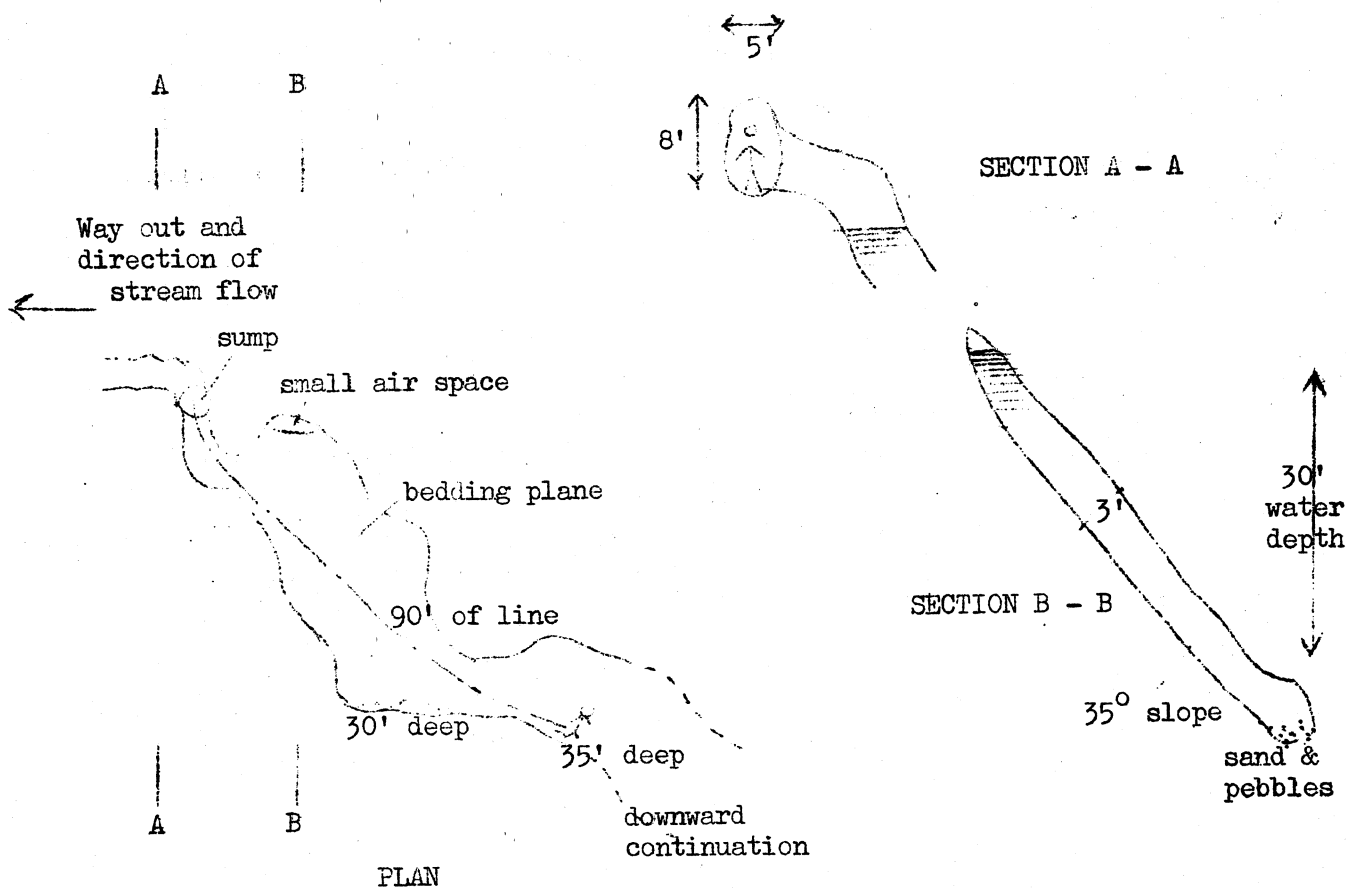
W.H.Little, 29 Wrekin Road, Sutton Coldfield, Warwickshire.

4. A DIVE IN TOOTH CAVE.

On Saturday 21st April with John Harvey, Roy Morgan and Bill Clarke.

Many people were put off by a wet and miserable day. Having heard a lot about the strenuous crawl into the cave, I vainly hoped to find it flooded. Despite the rain the cave was dry and showing no signs of flood water. A breathing set and the usual load of lead balls went in extremely quickly. The sump was at its usual level and the water was reasonably clear. Below the surface a bedding plane went steeply down-dip, although it continued to follow the same line as the surface passage. The average roof height was only about 3 ft. so the diver slid down a rope to a water depth of 30 ft. Here the passage levelled off for a short distance. After 90 ft. of line had been paid out from the surface the bedding plane continued downwards. At 35 ft. it was prudent to return as the way on is impossible for 'dry' cavers and because 100% O₂ is only safe to 30 ft. The surface pulled the diver out through clouds of silt. Near the sump a small air space was found, but it was merely the uppermost end of the bedding plane which closed down in a few feet.

Everything was soon outside again, but now coated with glutinous mud. The one discovery was that a wet suit is the answer for diving trips. A 3/16th Nylon lined suit was comfortable both when struggling into the cave and when under water.



C. Owen George.

5. THE ORIGINS OF THE O.F.D. CAVE SYSTEM

Further exploration in the cave system of Ffynnon Ddu has been at a comparative standstill in recent years. Progress seems to be blocked on the inside by the boulder choke and no new advance has been made from the mountain. Ogof Ffynnon Ddu 2 still seems a long way off.

It has occurred to me that it would be of interest at the present time to examine all the evidence available and try to arrive at some idea of the History of the cave's formation. This might point to possible lines of development and direct digging operations in a more fruitful direction.

Considering the area between the rivers Tawe and Neath, the present situation is that the water entering the ground at Pwll Byfre resurges at Ogof Ffynnon Ddu 1, and the water which goes to ground at

Pant Mawr Pot resurges in the Neath Valley a few hundred yards north of Pwll Du.

I have long held the view that this has not always been the case and that the following theory is one which has some appeal.

I believe that originally a river rising roughly in the area of Fan Fraith where the Nant-y-moch now rises, originally flowed S.W. past *Pwll Pant Mawr, into the Nant Llech Pellaf, a tributary of the Tawe, and not into the Neath. Examination of the contours proves this is a possibility. This river and its small tributary, which was probably rather larger in those days and may even have include the upper reaches of the Nedd Fechan, gradually went to ground, first near or at the Lost Valley Swallet and then at Pant Mawr Pot and formed the Pant Mawr - Ffynnon Ddu system. The cutting down of the river Neath in recent times altered the direction of flow of the groundwater. The drastic dropping of the water table on the Neath side caused this. Eventually although the then cave system was flowing west, a new system, formed by the new direction of flow of the ground water was eventually formed flowing East. Thus the River Neath captured the water flowing in Pant Mawr Pot underground. The Nant-y-moch probably changed its course and flowed into the Neath before this. The timing of these changes does not appear to be important. What is important is - did they occur?

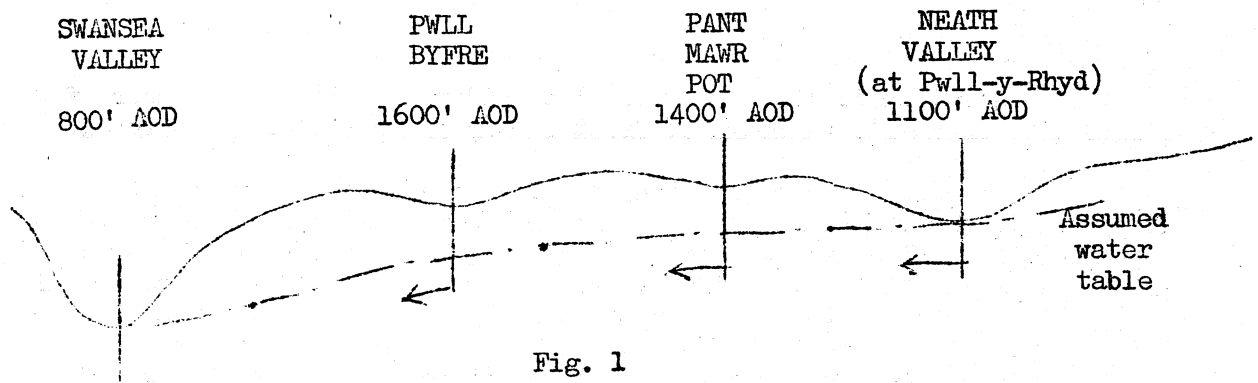


Fig. 1

At this time a cross section of the area, looking North, would be very roughly as Fig 1. The millstone grit would cover the limestone at this time possibly as far North as Pwll-y-Rhyd. The altitude of the known bottom of Pant Mawr Passage which must have been part of the original cave from its size alone, is about 1,030 ft.A.O.D. The present altitude of Pwll-y-Rhyd is 1,000 ft. A.O.D. so this water is unlikely to have risen in the Neath Valley. The assumed water table is shown dotted and shows that the movement of ground water in this region would very possibly be towards the West. Even water in the upper river Neath area (Pwll-y-Rhyd) could have tended in this direction. The dip of the rocks in the whole of this area is approximately West of South which

*Note: for clarity Pant Mawr Pot is the cave, Pwll Pant Mawr is the lake.

would also have helped this tendency, the angle of dip being in the region of 8° .

The cutting down of the Neath in recent times altered the direction of flow of the groundwater.

Fig. II would give a rough idea of the final state of the flow in the area. The Neath Valley has been cut down removing the Millstone Grit cap for a considerable distance until at the Risings for the Pant Mawr stream the altitude is 750ft. A.O.D.

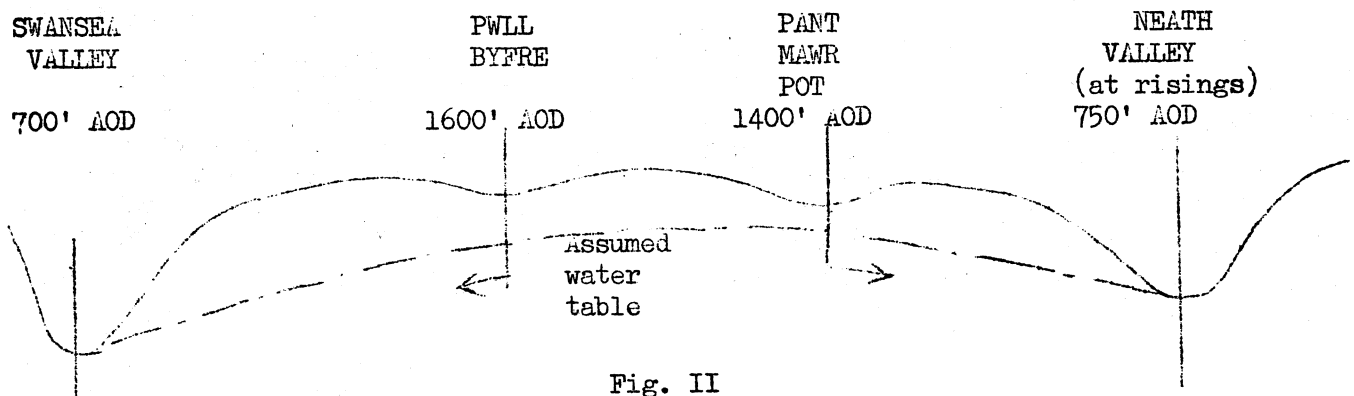


Fig. II

This then is the theory and I consider that it has a number of points to commend it, although at first it may appear rather far fetched.

Consider first of all Pant Mawr. It has been proved that the stream flows to the Neath Valley and rises in a number of miserable little risings which give the impression that the System behind them is pretty new (geologically). If this river always flowed East there should be evidence of one or two resurgences at higher level, say 200-300 ft. and perhaps half a mile further North. I have spent quite a bit of time in this area and have never come across any indication of an old, well established system. The millstone grit overlies the limestone and is not many feet above the risings. When the river bed was 200-300 ft. higher before the rejuvenation period this grit would cap the limestone for quite a long distance to the North. Also the ground and the dip of the beds is rising gently in this direction and this would increase the distance to the North where any possible resurgence from Pant Mawr could have been. There is an indication of a dry valley running N.W. from Pwll-y-Rhyd, but it does not look very hopeful. Any possible rising in this period must have been in the Pwll-y-Rhyd area because of the grit cap, but the bottom of the cave as has already been shown, was already at depth level with Pwll-y-Rhyd. This water could have risen near Pwll-y-Rhyd, but it is unlikely when considering that the Swansea valley was about 400 ft. lower.

If we assume that the theory put forward is correct, then except

for Sabre Junction there is nowhere in Pant Mawr Pot where there is any hope of making a connection. It is possibly well hidden in mud. It is true that the existing stream finishes up in an uninviting crack on its way to the Neath Valley.

To the S.S.W. of Pant Mawr there are two large chasms which are in the right place if there was a connection between Pant Mawr and Pant Ffynnon Ddu. The 'Lost Valley Swallet' is most interesting, and there is a possibility that a main swallet exists very near it. Examination of the area shows it to be rather covered with peat but it may be possible to hit the right spot for digging.

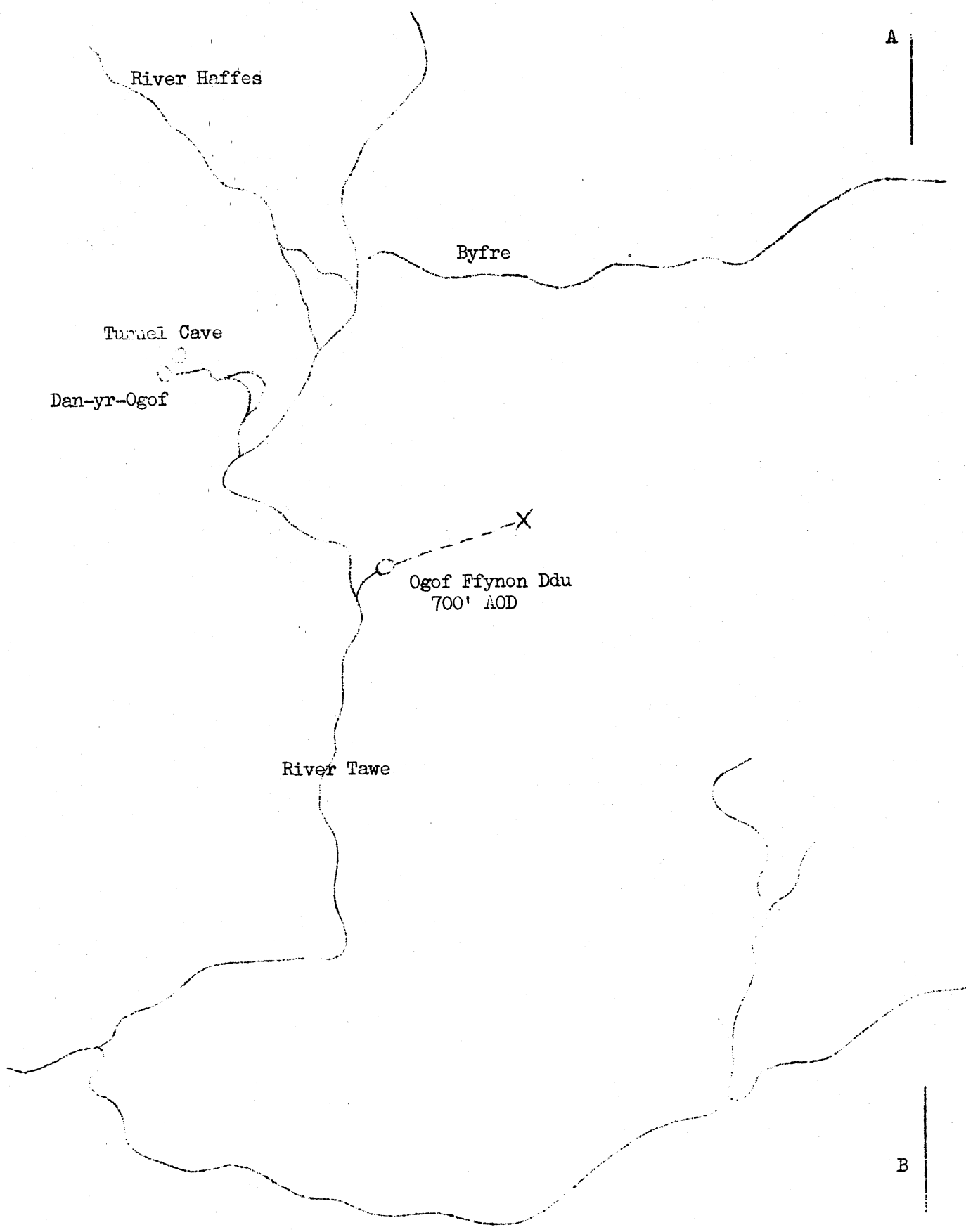
The resurgence of the water has never been proved, but if it did go to Ffynnon Ddu it would be pretty conclusive evidence that Pant Mawr and Ogof Ffynnon Ddu were connected.

It is very probable that Pwll Byfre is a relatively recent swallet. It was not many years ago the the Byfre flowed towards the Tawe in the open air and in fact it would not be difficult to divert it again as was done in 1951 when rescue operations were carried out. One might expect therefore, to find a pretty primitive cave system at this swallet, much on the lines of that opened up at Sink-y-Giedd. Therefore, all the evidence goes to show that the more promising dig would be the Lost Valley Swallet or the more westerly chasm. This chasm is in millstone grit, but I am pretty confident that we should be in Limestone about 20-30 ft down. I think I am right in saying that a draught has been noticed - my diaries say so anyhow.

Fig. III shows the relative positions of the various places mentioned.

The foregoing may seem like a lot of nonsense to some people, but I think I could draw a few conclusions from it:-

1. Pwll Byfre is probably a pretty recent Sink and therefore any cave would be rather small and new. Possibly digging would not produce any prolonged System. This can be compared with Sink-y-Giedd which is also a new System.
2. The best places to dig on the mountain would appear to be the most westerly of the two chasms and the 'Lost Valley Swallet'. I have done a little digging at both these sites but never to any great depth. The Lost Valley Swallet looked as though it could be most rewarding, especially as it might be an old swallet for the Afon Moch.
3. The Boulder Choke in Ffynnon Ddu is still the most obvious place for entering this vast unknown cave system. Possibly also Cwm Dwr will by-pass this, but the Boulder Choke will always be attractive because it is the actual 'Master Cave' passage only blocked with rocks.



River Haffes

A

Byfre

Turnel Cave

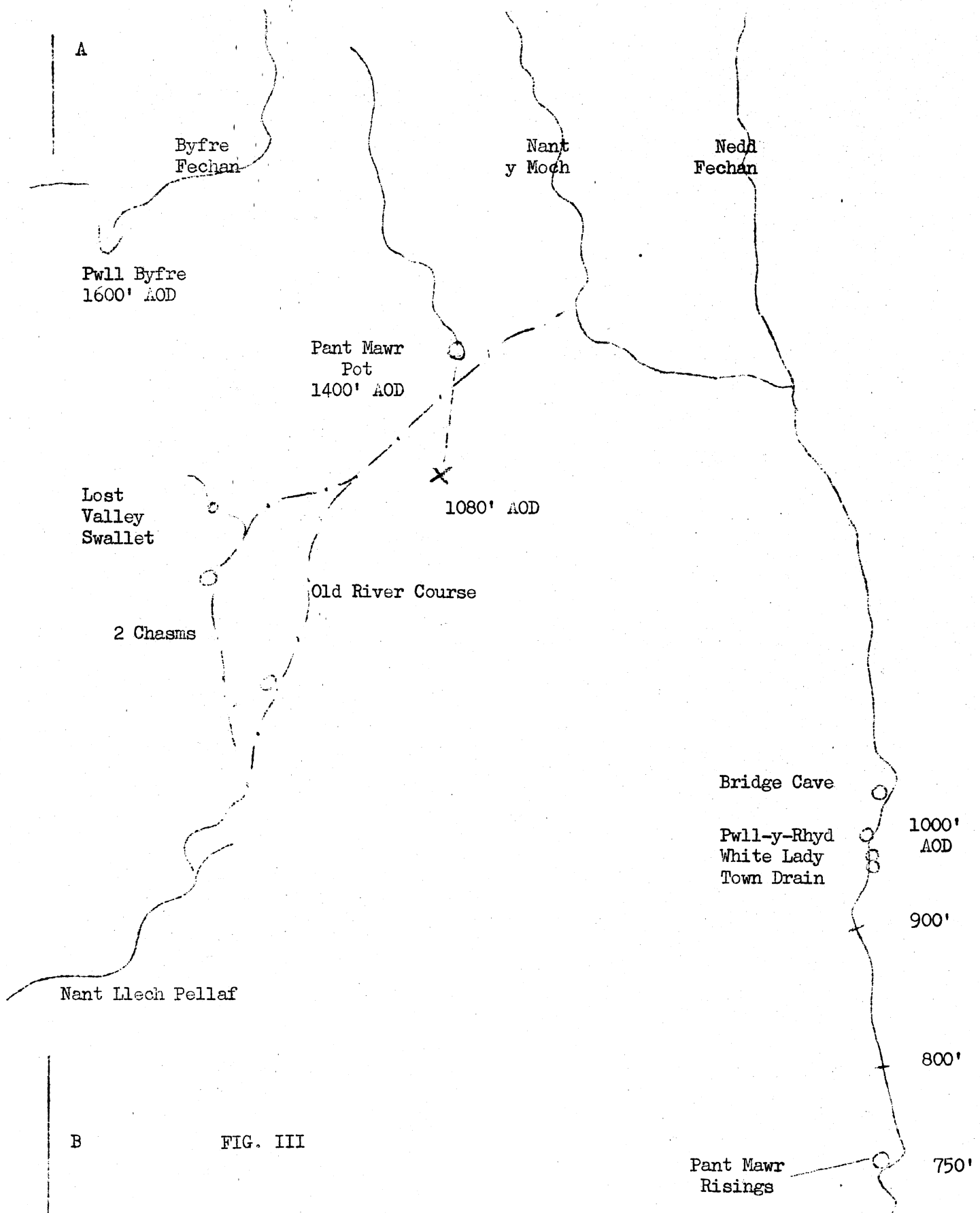
Dan-yr-Ogof

Ogof Ffynon Ddu
700' AOD

X

River Tawe

B



There are a number of interesting possibilities in the progress of being dug on the mountain such as the Hot Air Mine and Dai's Dig etc. but getting in in this kind of place is obviously a matter of pure luck. Anyway lets hope that somebody gets a bit of luck soon.

P.I.W. Harvey.

"SIEDYN(S) IN O.F.D.

"Siedyn is Welsh for Hummingbird. There are no humming birds reported in O.F.D. so the "birds" that will be seen in the future sipping a straw here and there in O.F.D. and elsewhere, have another natural explanation. They are part of a research program being undertaken on the composition of the water from which speleothems are precipitating. This note is to provide answers to questions which a caver might otherwise be tempted to answer himself by disturbing a siedyn, which would be unfortunate as they do not inhabit caves where they may be disturbed.

The subject being studied is the possibility of either calcite or aragonite precipitating under cave conditions. You can learn all about the Aragonite-Calcite problem by borrowing a copy of a paper (1960) on the subject from the librarian of the S.W.C.C.; but here is the story in a water drop.

Aragonite is more soluble than calcite in cave water. For it to precipitate the water must also be able to precipitate calcite. The cause, then, of one or the other showing up depends, first, on whether the solution is strong (saturated) enough to have it crystallize out, and second, the relative rates of formation of one or the other. The siedyn is taking a taste to answer the first question and provide hints on the second.

There is one in Figure 1. Held in the tip of its bill are two drystals; one each of aragonite and calcite, which nucleate the drop. If the solution is supersaturated with respect to both, both should grow; if supersaturated with respect to calcite but not aragonite, only the former can grow while the latter will dissolve; if undersaturated with respect to both, both will dissolve. Which will it be? We hope to find out and the siedyn is doing most of the work.

However it is not easy to live with a siedyn. They are difficult to breed. They must be handled very carefully: and they are reluctant to tell all, even after they know the answers. Therefore some simple 'rules for the care and feeding' should be observed if they are not to fail in their duties.

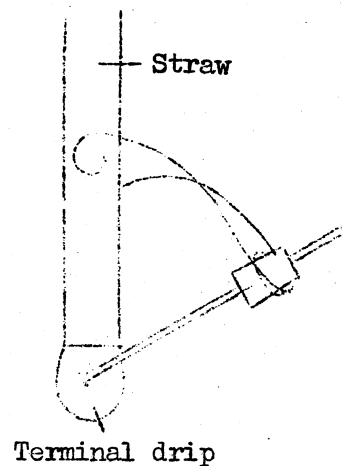
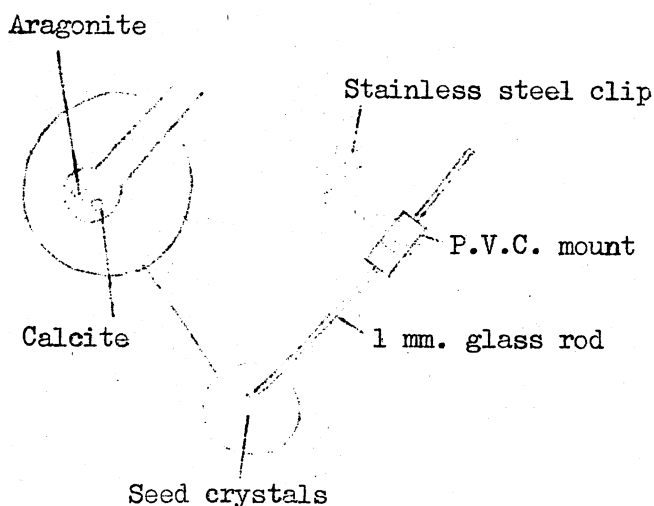
1. If seen, they should not be disturbed; they die if touched.

2. If seen, look and leave; they are temperamental and will not work if there is a change in local air temperature, humidity, or in the concentration of carbon dioxide in the air.
3. They especially dislike open flames!!! A quick look at a sfedyn may not cause too much anxiety, if infrequent, but even then HOLD YOUR BREATH, and use an ELECTRIC TORCH ONLY.

A number of persons have been involved in the first generation breeding; they are David Cons, John Keefe, Irené Lane and the writer. The project will be supervised locally by David Cons.

Rane L. Curl,
Dept. of Statistics,
University College London,
London W.C.1.

Fig. 1
"A SIEDYN"



7. CAVING IN NORTH WALES.

or

Just one 'ole after another.

The trip made to the caving area of North Wales by Neil Jones and myself was in the nature of a reconnaissance and a most useful one it turned out to be. As the area was new to us we camped near the sea at Abergele but the site became rather crowded. However there are plenty of quiet sites a few miles inland and for those who prefer rough camping there are large areas of open ground.

On Whit Saturday, Neil and I set off inland making our first

stop at Rhos-isaf Farm. The farmer Mr. Huws was most helpful and with his aid the sites of four small caves were located in a small limestone cliff running parallel with the road. From information in our possession it seemed that there was another cave in the adjoining farm at Perthi Chawareu. This is easily seen from the road. Just as we were leaving we met the farmer Mr. Beech who gave us the locations of three more caves. The positions are shown on the sketch map. All are small but one near the old lime kiln has a slight draught.

On to the cave at Llanarmon which has a large entrance and an almost equally large notice saying 'Private Property - Keep Out' With nothing to lose we went to the farmhouse and asked for permission to visit the cave. This was readily given and into the cave we went only to find that it ended after some 40 ft. Incidentally painted on a door of one of the barns in large letters were the words 'Cave Toys' This leaves room for plenty of imagination. We can recommend the Raven Inn at Llanarmon as a friendly place for refreshment.

Nine caves in one morning - not bad.

On 1" and 2 $\frac{1}{2}$ " O.S. maps are the tantalising words 'Pot Hole' at SJ/196593. We talked for some time as to whether it was worth while going there or not. Eventually we decided to give it a try so that our consciences would be clear. We travelled down a rough track and eventually came to a cottage where it was decided to ask for information. As I approached the garden gate I was fascinated - no horrified - to find that the cottage was called POT HOLE!! I mean to say, some chaps call their homes Cribarth and so on but to call a house Pot Hole, well it just isn't done. The owner was most friendly and from him we learnt that the only holes in the district are old lead mine shafts. After a slight delay while the rear axle and spring of Neil's van was put back into place we continued our wanderings stopping next at Maeshafn Cave which is situated in a forestry plantation called Big Covert. For North Wales it is a sizeable cave being some 300ft. long, part mine and part natural. The most interesting feature of the cave is the steep angle at which it descends.

After stopping only to locate the sites of the caves around Loggerheads and Cilcain we went on to Tremeirchion and up the road to Graig. On our left were the Ffynnon Bueno Caves now all wired in and at the rear of the cottages are the Tremeirchion caves. By the way, if you should drive up there do not try to turn round in the road - go right to the end - it's easier. Our last cave for the day was Moel Hiraddug Cave at Dysserth. From a conversation with a quarry man it seems probable that this cave will become dangerous and eventually lost due to quarrying

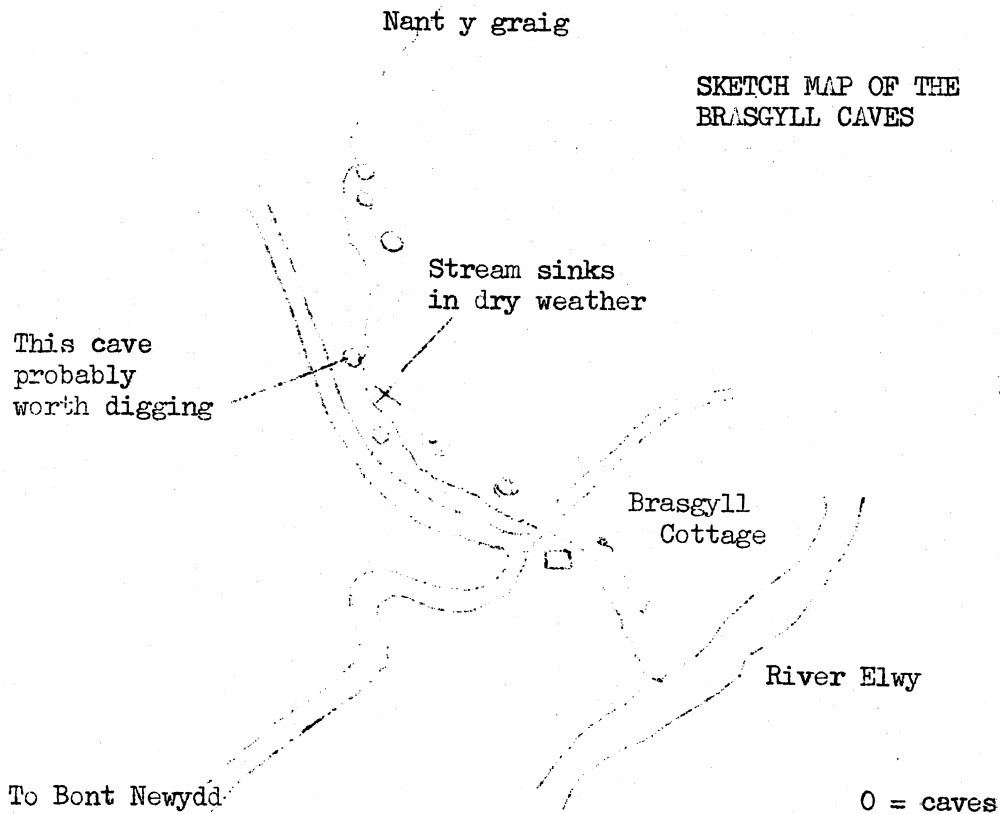
The next day saw us in the Cefn area this time accompanied by my wife and children. Our first cave was Dell Cave which is situated in a wooded valley. A word of advice - it is far easier to reach the cave by walking along the field at the side of the wood than struggling through thick undergrowth. The cave has a large entrance but the interior did not hold our attention for long due to the presence of a dead sheep.

Because of the overall size and build of the two caving members

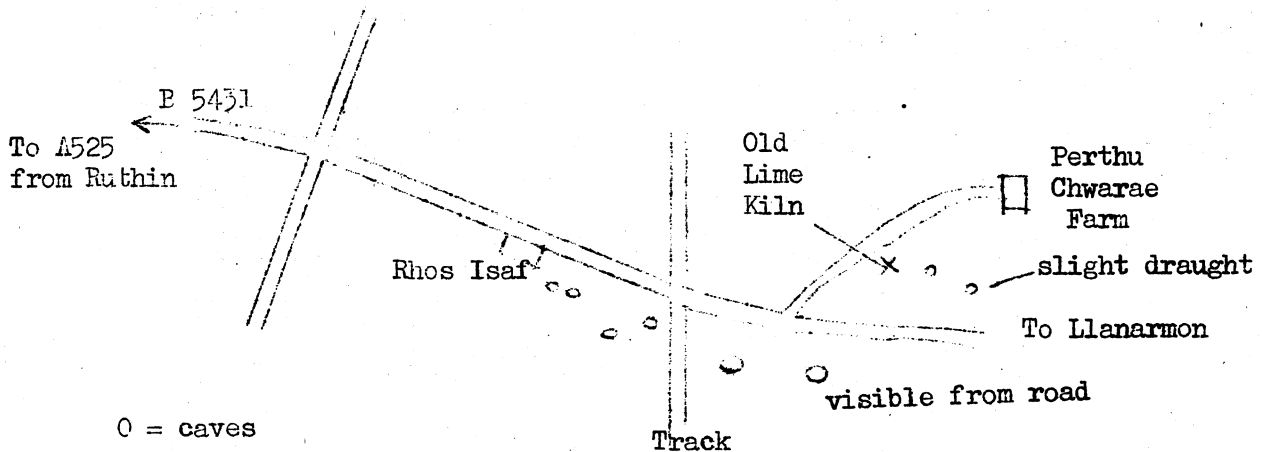
of the party we gave Afon Meirchion Cave a miss and went on to Cefn Cave. This cave is the largest in North Wales and some 500 ft. long with three entrances. The clay fill has been removed and so with the aid of a torch it is a pleasant walk round the passages. On the road from Cefn to Bont Newydd is Bont Newydd Cave. This must have been used as a war time store for the entrance is bricked with a double wall. At the end there was until recently another wall but this has now been broken down. Digging here might prove beneficial.

From Bont Newydd we went to Brasgyll Caves. These are in a small but picturesque gorge near Brasgyll Cottage. The whole gorge is well worth walking through although there does not seem to be any sign of cave development below the bridge to the north. There are a number of obvious caves but our interest was centered on a small opening which was covered with boulders and which to the best of our knowledge has not been recorded. The entrance led to a 10 ft. drop into a passage which in turn led to a chamber. Daylight can be seen entering from a small hole on the right. From this chamber another passage leads off which we intend to dig.

There is no doubt that the whole area merits far more attention than it has so far received. The fact that the caves found are small should not deter more strenuous efforts being made. I should like to take this opportunity of saying how much easier our search was made by the use of the Shepton Mallet Caving Club pamphlet 'Caving in North Wales' by F.J Davies and B.M. Ellis. The authors are to be congratulated on the excellence of their work.



SKETCH MAP OF CAVES NEAR RHOS ISAF



8. CLUB NEWS AND 1962 O.F.D. LEADERS LIST

Changes of Address.

Bernard Woods, 27 Foxley Lane, Purley, Surrey.
Mr. & Mrs D. Cons, 19 Chepstow Road, East Croyon, Surrey.(until Sept'62.)
Dr. D. Thomson, 115 Harport Road, Redditch, Worcestershire.

O.F.D. Leaders.

The following members have been elected to the O.F.D. Leaders List:-

T.B. Grohman, J. Dryden, J. Harvey, A Morris, J. Roberts
R. Roberts, A. Stephens. R. Morgan.

New Members.

We welcome the following new members to the Club:-

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 Richard J. Barr, Chestnuts, Histons Hill, Godsall, Staffs.
 Richard Bayton, 15 Weig Gardens, Cendros, Swansea.
 Mrs. Robertha Boyd Bevan, 399 Hagley Road, Edgbaston, B'ham.17
 Patrick M. Cleary, 26 Heol Esgyn, Park End, Cardiff.
 William Hughes, 16 Greensome Close, Dexey, Stafford.
 Mrs. Mavis G. Jefferson, 6 Rhiwbina Hill, Rhiwbina, Cardiff.
 Bernard A. John, 12 River View, Gabalfen, Cardiff.
 David C. Pearce, 31 Cambridge Road, Gatley, Cheadle, Cheshire.
 Miss. Joan Percival, 14 Wood Green Road; Hall Green, B'ham 28.
 Michael W. Pitcher, 74 Lavendon Road, Perry Barr, B'ham. 22B.
 Marcus Skinner, 11 Three Arches Avenue, Llanishen, Cardiff.
 Mrs. J. Webley, 39 Heol Isaf, Radyr, Cardiff.

 **
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 **

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 Junior members 7/6d.

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 Ball, T.K. Bronderi, Peniel Green, Llanamlet, Swansea.
 Birchenough, W. Address not known at present.
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 Hon. Records Officer..D.W. Jenkins, Dinmore, Dyffryn Road, Llandrindod Wells, Rads.

South Wales Caving Club.

Library List.

Recent Additions.

Supplement. No.1.

Axbridge Caving Group. February, March, April.

*B.N.S. Spel. Section. 'Signpost' Cuttings up to latest issue.

Bristol Exploration Club. Jan. No.167. Priddy Green Swallet; Bottlehead Slocker; Nine Barrows Swallet; St. Cuthbert's Swallet.

*The British Caver. Vol.35. Full of articles on caving.

'Explorando a Cuba'.

*Cave Research Group. Transactions. Vol.6. No.1. Underground water, Geology and water-divining; Recent explorations at the Torbryan Caves; Jugoslavia-Some of its caves and scenery.

*Newsletter No.86. Full Report of A.G.M.

*Biological Records. Pt.7. 1957-1959.

Chelsea Spel. Soc. Vol.4. No.4. Minerology. No.5. No.6. Minerology

* Hereford Caving Club. N/L No.12. Agen Allwedd; Ogof Ffw; Ogof Clogwyn and Shakespeare's Cave.

* N/L.No.13. Agen Allwedd; Harwood Hole.

The Mountain Club Magazine. Vol.6. Nos.1 and 2.

* N.S.S. News. Vol.19. No.11. No.12. Vol.20. No.1. No.2. Some old and new techniques of vertical caving. No.3. Some old and new techniques of vertical caving concluded. Machine processing Speleological data.

Westminster Spel. Group. Bull. January, February. 1962.

White Rose Pothole Club. Journal. Vol.1. This new publication is of great interest to all cavers.

'Ingot' Agen Allwedd.

* Bristol Exploration Club. Caving Report No.4. The shoring of Cave Entrances. No.5. A Survey of Headgear and lighting available for Caving. No.7. A second report on St. Cuthbert's Swallet.

Members are reminded that those items marked * require £1 deposit which is returned when the publication is returned to records. Postage is payable both ways by the borrower.

As stated in the first library list certain publications were only listed and details were to be given later. The details of these publications are given below and thus the basic list is now complete.

National Speleological Society of America.

*Speleo-Digest 1956. Section 1. Cave Descriptions; Section 2. Cave Science Flying Mammals; Blind cavers; Cave blindfish; Cave insects; Fossils; Archeology for spelunkers; Notes on the occurrence of cave pearls; Fossil caves. Section 3. Cave equipment and techniques; Rope notes. Section 4. Cave ethics. Section 5. Prose, poetry and cartoons.

*Speleo-Digest. 1957. Section 1. Cave Descriptions. Section 2. Cave Science Bats of the Missouri Caves; The bigs of Carpenter's Cave; Cave Vertebrates of Florida; Biological Notes (Texas); Some notes on cave salamanders; Biological study of Carlsbad Caverns; Ebb and flow springs; Limestone topography and the Karst Cycle; Notes on the Karst of Jamaica; Dirt under foot; The calcium carbonate system, a crystallographic survey; Cave gypsum. Section 3. Cave equipment and technique. Technique of cave mapping; Speleo-Stadia; Photography by carbide light; A simple rope ladder; Stream tracing; Stream dyeing; Radio speleology; Section 4. Cave ethics. Section 5. Prose, poetry and cartoons.

*N. S. S. News. These contain many articles on American caves. I have listed only those of general interest.

Vol. 13. No. 4. Photographing the cave rat. Vol. 13. No. 6. Cave Exploration Policy Vol. 13. No. 7. Rope ladders No. 8. Collecting and preserving cave fishes No. 9. Cable ladder construction. No. 10. Cave Pearls in the rough. Vol. 14. No. 3. Cave conservation. -biological aspects. Vol. 16. No. 6. Minimum safety skills. No. 7. Cave springtails. No. 10. Millipeds; Cave pearls. Vol. 17. No. 6. Speleo-Meteorology. No. 9. Bilgeri method of ascent No. 11. Micro-gours. Vol. 19. No. 6. A new climbing knot.

The interested caver will find a great deal of material in these bulletins which will be loaned out a volume at a time.

Wessex Cave Club. 27. Diving 28. Caving and Archeology¹ 29. 30 Cave Photography. 31, 32, 33 Cave Photography 34, 35, 36, 37 Bat ringing 38. 39, 40, 41, 42 Devon Caves 43, 44 Caves on Steep Holm. 45 Caves of Malta 46. 47, 48 Austrian Caves 49, 51 Asellus. 52 The caver's kitchen; Cave sickness. 53, 56, 58, 64, 65, 66 68, 69, 70, 71, 72, 73, Mud stalactites in Swildon's Flve. 74 Grading Caves. 77, 78, 79.

Note. Although many of the above issues of the Wessex Cave Club have nothing listed against them it should not be construed that they are of no interest. Nearly all the issues contain articles of great interest to those who wish to cave on Mendip.