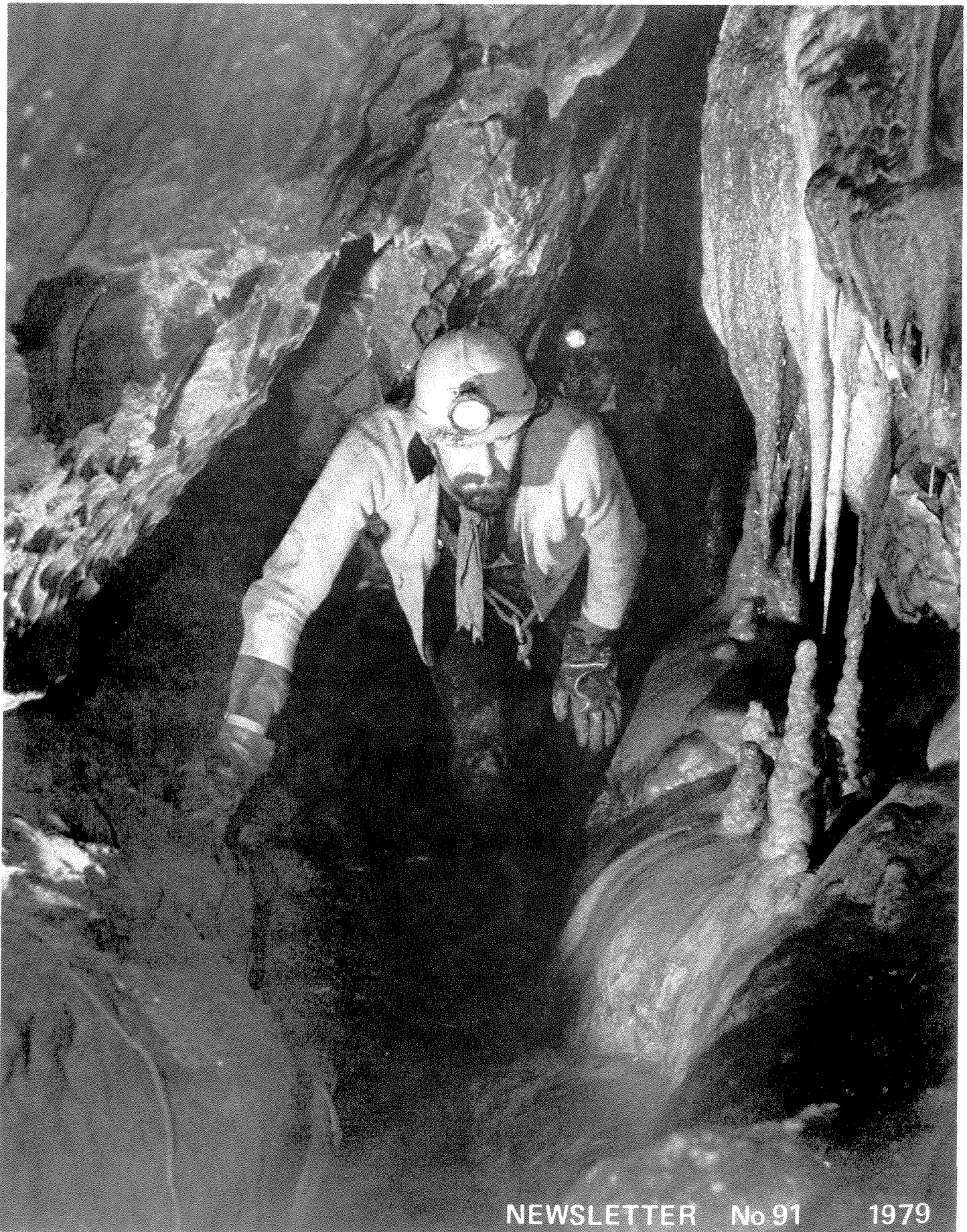


SOUTH WALES CAVING CLUB



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NEWSLETTER No. 91

FEBRUARY 1979

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RECENT WORK IN DAN-YR-OGOF

During March 1978 the Dan-yr-Ogof IV project was revitalised in a sustained effort to break new ground. Our assault on Mazeways II, undoubtedly a key area in the system, required considerable preparation. From the start it was clear that any way on would be the product of a major dig and necessitate the use of explosives.

Previous work had shown that a good draught passed through the divers' extension. This flow of air had been sufficient to permit almost immediate examination of the Northern Choke after a charge had been detonated. At the southern end of the network the draught was lost and clearly a priority was to establish where this lay. Of the numerous chokes in this area two showed some promise. The first of these was the blockage at the end of Cribarth Inlet, but this had been dug extensively in the early seventies. The second was a rather precariously suspended choke above the Cribarth Aven. This appeared to be a flood overflow from the underlying Cribarth Inlet. While fumes cleared from the Cribarth Aven Choke it would also be possible to work the other alternative with little delay or loss of time.

Work commenced with three solo visits and quickly proved the the elusive draught issued from the Cribarth Aven - fumes cleared in less than an hour. Climbing into the boulder ruckle at the head of the aven was highly exciting. On one occasion it nearly proved fatal. Returning to the scene after the fumes had cleared I was climbing the knotted rope, ten feet above the floor, when movement could be heard above. Letting go of the rope, I hit the cone of rubble with a bump and just managed to dive out of the line of fire before a massive boulder and shower of rubble landed. Fortunately only bruises and some nasty cuts were suffered.

A substantial cavity was now excavated at the head of the aven, but the need for company was a very real consideration. By May the choke had been extended for twenty feet horizontally, and Phil Rust made his debut. Continued work on the Cribarth Inlet Choke had yielded no progress whatsoever - but there must be one hell of a cavity wherever the tons of debris came from!

On June 2nd the way on was plainly visible at the aven choke, but the route was nothing short of harrowing. After we had both studied it very carefully Phil decided to try his luck and squeezed through. Having ascertained that there was something big beyond, I followed. To say that there were beads of perspiration breaking out on my forehead would be an understatement, but the lure of the missing miles was gripping.

Four hundred feet of large passages were quickly explored, leading to a large chamber where a small stream tumbled from a sizeable high level passage - Cobbler Aven - impossible to reach without climbing equipment. The breakthrough had taken us above and beyond the level of the Cribarth Inlet choke. The new passages were still aligned predominantly North-South, but the presence of the small stream, with massive cobbles, certainly tied in with the "overflow" theory at the Cribarth Aven. Any Jubilation was easily suppressed with thoughts of the choke. One thing was certain: there was still plenty of cavernous limestone above the level of Cobbler Aven

On 24th of June we set off with high hopes of a major breakthrough. Collecting our "rescue comforts" tube and digging tools, everything was carefully passed through the choke. Protected by a bolt halfway up the pitch, M.F. scaled the last fifteen feet to gain a high level passage. A tube five to six feet in diameter led off North. When Phil had made the ascent we set off to explore, but unfortunately encountered a choke after 70 feet.

Several possibilities existed for a continuation, but eventually a route was pioneered up a desperate undercut little chimney. After digging his way through yet another squeeze along the face of the choke Phil was quickly in an uproar about a big rift ahead. Traversing diagonally up this a fine old fossil passage was entered, again running due North. Suddenly, and quite unexpectedly, we arrived at a window from which a huge trunk passage could be seen running below, and almost parallel (south west - north east). An awkward and exposed climb of fifteen feet led to the floor. Taking first the upstream direction, South West, we encountered more chokes in less than 200 feet. At the actual termination a promising crystal clear sump was found. Directly to the left of this lay a major choke, which as we later discovered took the draught. In the other direction another set of chokes blocked the main passage after 200 feet.

This new large passage is almost definitely the continuation of the Main Passage in Mazeways II. Since the new extension beyond Cribarth Aven chike is in fact completely separated from the main body of the Divers' extension it has been named Mazeways III. This series is over 1000 feet in length and takes the cave as a whole further to the South West.

Hopes were still very high for a major breakthrough, but the state of the Cribarth Aven Choke was extremely intimidating. After our return from Ireland the assault was renewed, initially concentrating on either removing the choke or opening up an alternative route. On 26th August we found that floods had left their mark and the choke was now in a suicidal condition. On the previous occasion a charge had been laid to blow the place in, but this had misfired. Now it threatened to fall in of its own accord. A further strategically placed charge was laid and the process hastened. The rest of the visit was spent in a state of high tension while clearing the debris. Working in relays of about half an hour apiece kept the adrenalin flowing sufficiently to maintain body temperature during the periods of inactivity. Eventually and miraculously a comparatively safe route was constructed.

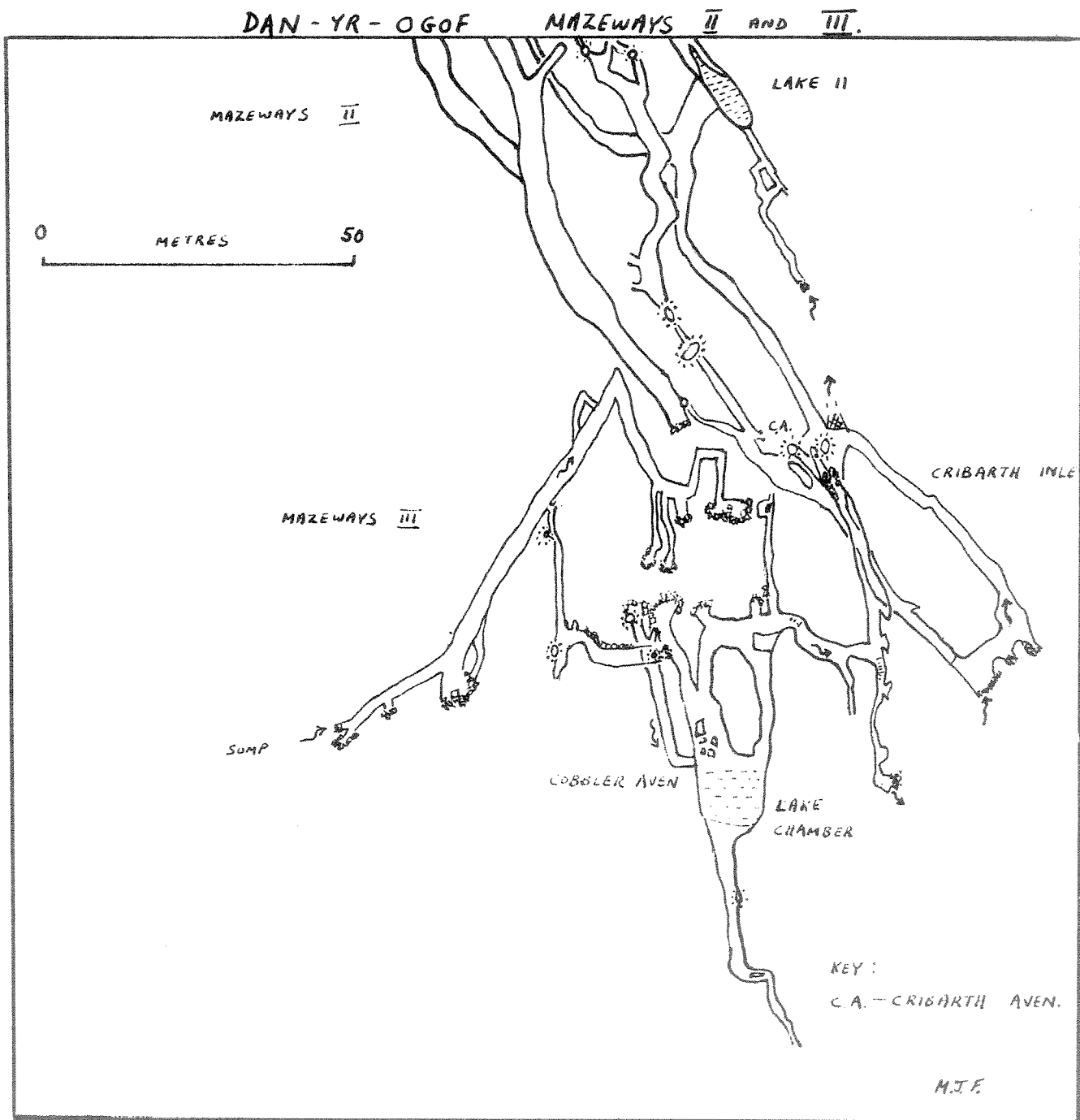
The plan then was to dive the sump at the Southwestern limit of Mazeways III. A recce was made using a mini bottle and we found that the sump could be followed for 50 feet to a boulder blockage. At this point the passage was clearly surfacing, depth six feet, and a way on was visible a few feet ahead. The dry chokes at the start of the sump were now regarded as long term projects.

On the next visit Dave Morris joined us. A larger cylinder was taken and the underwater choke attacked using a crow bar. After twenty minutes and five feet of flat out headway poor visibility caused a halt. A further effort made a total penetration of ten feet into the boulders, but at the limit digging was impossible. The way on lay in the roof, a rather dangerous proposition underwater.

What avenues does this leave? The dig at the end of the sump would be highly feasible if the water level could be lowered. Since this would be very difficult the main hope is the droughty choke. With the reversal of air flow under winter conditions continuous digging will be possible. However hopes of a quick breakthrough can be ruled out. There are also two other avens in Mazewys III which will have to be climbed.

A dry route back to Dan-yr-Ogof 2 would be useful, but it would only shorten the route by about one hour. Three or four visits can be made on one cylinder, so a great deal of the diving portorage has been removed. The trip to the end is one of the most technical in the country but the challenge of D.Y.O. IV makes it worthwhile. The through trip to Sink-y-Giedd will be an epic!

MARTYN FARR



TASMANIA - THE CAVER'S STATE

The Island State of Tasmania resembles an inverted triangle, across the top it is some 180 miles long and down the centre to its point in the South it is about the same length. Scattered through the State is a population of some 400,000 although these are mainly in the cities and villages. In fact on the West Coast there is an area about 90 miles long by 60 miles wide - 5400 square miles - into which there is only one access road, and even this does not extend very far into the area. It is amazing to realise that in this day and age there are areas within Tasmania where man has never set foot. It is also amazing that some of the places which are now deserted and given over to impenetrable bush are the same areas where the first colonists arrived and set up their isolated homesteads.

Having arrived with Lyn to take up employment in this wild western area of Tasmania, we started to look round for kindred spirits; i.e. dirty cavers. Not only did we find a handful of them scattered through Tasmania but we also found lots of caving areas. In fact we were in the embarrassing situation of finding that there was almost one area for each caver. Tasmania possesses no less than 34 caving areas. Two of these lie off the coast on adjoining small islands but still within the state, while another two areas have only been noted by their dolines, shakeholes and vanishing streams from the air. As yet, although limestone is known to occur in these places man has not set foot to explore the wilderness and the caves that exist there.

Of the remaining caving areas within Tasmania a number have been explored. The area south of Hobart interesting the cavers from the capital, while on the Northern Coast the Mole Creek area attracts those of the second city, Launceston. Among its caving potential Tasmania possesses the longest cave and the deepest cave in Australia. The longest is in excess of 10 miles and the deepest exceeds 1000 feet. Tasmania also has the deepest single pitch in Australia at over 486 feet. The caves are very spacious, cold and very wet. Indeed from the point of view of temperature and humidity Tasmania is very English but there the similarity ends.

On one of our first trips with the Tasmanian Cavers we were given an insight into just how different the caves really are with a trip into a cave called 'Khubla Khan'. Beginning in a typical caving manner from just outside the pub at Mole Creek a small group of us went out into the bush in an assortment of Land Rovers and other vehicles to a small entrance at the base of a limestone bluff halfway up a steep hillside. The short downward slope was like any other cave, muddy grubby and unpromising. However after only a few feet the downward slope gave access to a small tight squeeze through a gate, - yes we have them here as well! This opened up into a kind of sentry box looking out into an enormous chamber. Here we belayed 100 feet of rope to abseil down into the cave itself. All work in Tasmanian caves seems to be SRT. One by One we abseiled down into the gloom. As I was tying on I turned to look out into the chamber and realised my light was shining halfway up a stalagmite column. Since this column must start from the floor of the chamber 90 feet below it could only mean the column was at least that high. For the first time I sensed the

scale of the chamber I was about to enter. The pitch was vertical for 50 feet then sloped down steeply for another 40 feet. On arrival at the bottom I found myself on a terrace of rimstone pools looking out into an enormous chamber. It was literally the biggest chamber I have ever seen in my life. The rest of the party were disappearing into the distance and their lights as they went gave further scale to the immense size of the cave. Following on at the end of the party we passed deeper into the cave. Chamber after Chamber opened up, each one brought more and more formations. Here and there columns rose 40 and 50 feet to form forests of stalagmites all around us, great walls were covered in curtains. It was an incredible sight.

The Tasmanians had made some attempt to preserve the area and in one or two places which for them were of exceptional beauty, but for us were sheer wonder, they had taped paths to walk through. We advanced from chamber to chamber and as we advanced the wonders became even greater. At one point in the cave known as the 'Silk Shop' the sloping walls were covered in rows of curtains, some of them 4 feet deep. It was an incredible sight, in the U.K. one or two such curtains would be a cause for admiration, but here there were literally dozens of them disappearing into the darkness all running parallel with each other down the wall. In another chamber was a series of rimstone pools - which at the time I thought to be quite enormous, but I have since seen that Tasmania has bigger and better - each one the size of a hip bath, and all studded down a flowstone slope of remarkable beauty.

The final chamber of the series was a great place full of shattered boulders, a kind of underground rockpile very reminiscent of some of the large chambers in the Berger. I would say that the area of the chamber would be on a par with Gaping Ghyll Main Chamber. It was here that the largest of all the formations stood. Rising out of the gloom was the Great Khan himself, A great stalagmite formation 70 feet high towering up to the unseen roof more than a hundred feet above our heads.

It was at this point in the exploration that our party split in two. Those members of the party who had longer legs continued into the cave while three others returned back along the way we had originally come to remove the ropes and tackle left at the series of entrance pitches. The division of the party into long and short seemed rather strange, but as the journey progressed the reasons became fairly obvious. Continuing we dropped down almost to the base of the chamber almost to the feet of the Great Khan, then took a series of smaller passages which dropped through the rock pile. These passages were of a more sporting nature with constant straddling of small rifts and chimneys, although the formations still continued in abundance. After an hour of steady progress we emerged on to a small balcony looking down into yet another enormous chamber, this time with the distant sound of water coming from the depths. An easy abseil took us down to the floor of the chamber which had high mud banks on either side of a small stream. Proceeding along this stream for a short distance the chamber gradually narrowed until it became a high narrow rift with the water becoming deeper. Here we left the stream and did a series of traverses which started off up a calcited slope, using stals. for handholds, and eventually led to a series of narrow ledges some 60 to 80 feet above the main stream. The traverse of these ledges proved highly sporting and at this point we realised why the selection of people had been made in favour of those with longer legs and a longer reach.

In standard the traverse was probably no more difficult than Bolt Traverse in OFD, but this was without the cable, and in length I suppose the total traverse was about 1000 feet in all. It took us some $1\frac{1}{2}$ hours to complete the traverse which had a few quite hairy moments when one swung around bosses relying on the advice of those in charge of the party who told one exactly where to jump at things that one just could not see. The proceedings were enlivened by a series of light failures which affected about 40% of the party including yours truly. Gradually however the traverse led down once more to stream level, which in turn after a few yards led to a steep calcited slope leading upwards. A rope was soon rigged to assist most of the members to ascend.

Upon arrival at the top it turned out that we had reached the final part of the cave. A large chamber strewn with vegetable remains and mud covered boulders gave access to the bottom of a 60 foot pitch leading up to a star filled sky. From this point the party slowly prussiked up to the outside world on a rope left hanging there earlier in the week.

The night outside was brail black, and findin ones way back down the hillside to where the vehicles were parked was probably worse than traversing the ledges above the stream passages withput a light. We finally got down to the vehicles and found them encrusted with frost white as a Christmas cake. Over a brew of hot soup we sorted out the gear and changed; then finally took off for our various corners of Tasmania, It had been a fantastic trip but it is only one of the many fantastic trips Tasmania has to offer. The cave was beautiful but again it is only one of the many beautiful Tasmanian caves. For those who feel that their caving trips are losing that spark e of their youth I can only say that Tasmania will put it back; and for those with a Mendip upbringing we even have cider here. All we need to complete their scene is the Hunters.

FRANK SALT

SPLASH INLET AND FAULT AVEN

These are a few ideas on passage formation which may be of use when considering exploration in the Cwm Dwr/ Splash Inlet drainage area.

As anyone who has made the journey along the OFD II streamway will know the are several streams entering the main streamway. The obvious entry is the Cwm Dwr Stream at the confluence, but further upriver there are several other showers cascading from the roof. Once again there is an obvious large entry at Marble Showers but there are others, notably Splash Inlet which is quite phenomenal in wet weather. In fact I ve counted well over a dozen showers entering the main stream between the Confluence and Maypole inlet, more in very wet weather. Where does this water come from, and what indication does it give of as yet unexplored cave passages?

All these tributaries, with the exception of Cwm Dwr enter the stream from high above. Furthermore all enter from the Northern side of the streamway with the exception of one large waterfall just down from

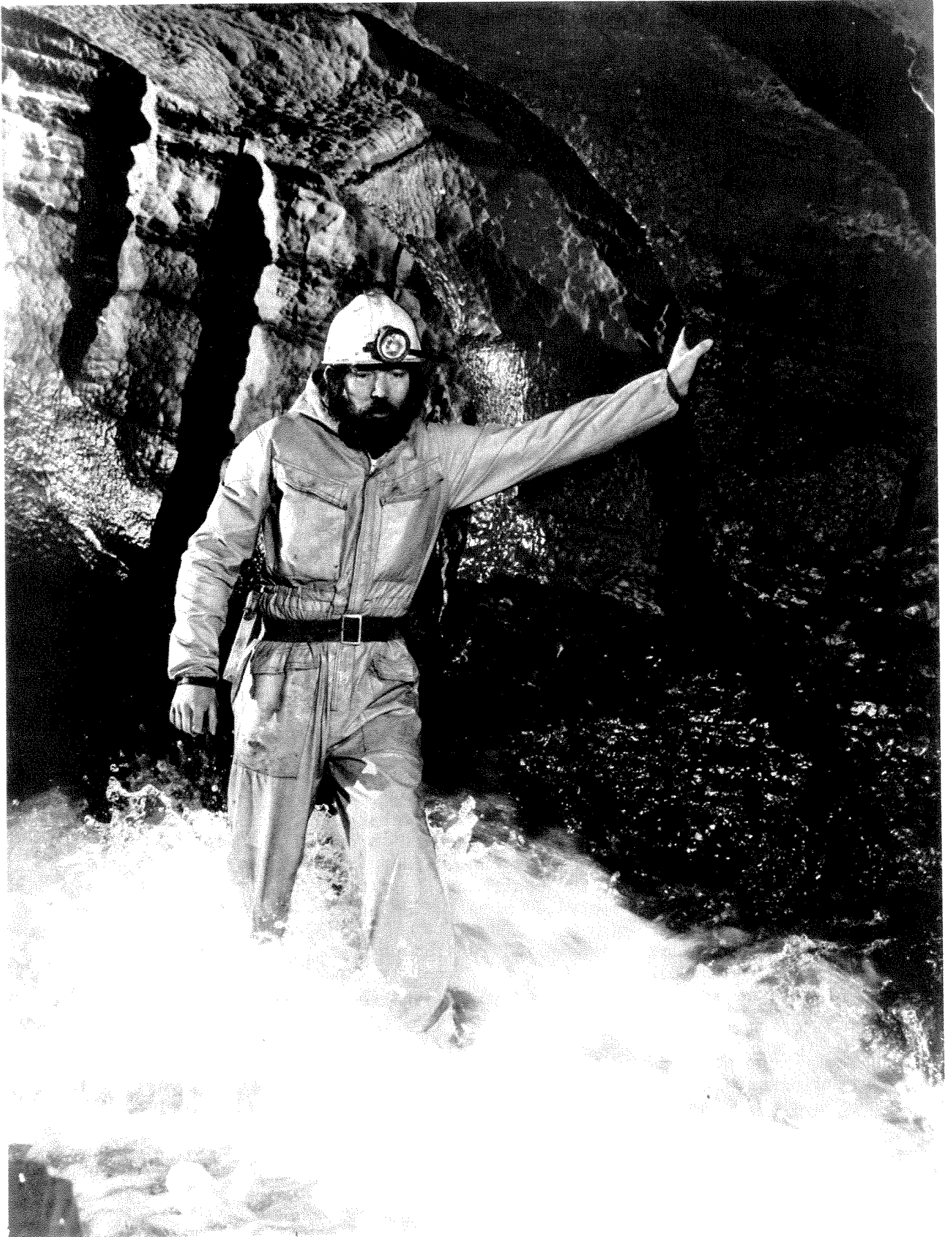
Marble Showers. They enter from reasonably large rift-like passages, This bears out the theory put forward in the OFD book:-
"The effects of the differences in the joint pattern are apparent in the general direction of the cave passages. Of particular note are those developed along East-West directions which show predominantly phreatic characteristics while the North-South ones exhibit mostly vadose features." The finest example of the vadose rift here is the Jama in Cwm Dwr, but there are numerous others, one being the rift from which Splash Inlet is found to come if one follows it up from the main stream.

Looking at the phreatic tubes one can follow the traces of the original roof level tube of the original main stream from a point near the Crevasse, down Pendulum, across the Nave, past the Trident, along Selenite, down Midnight and along the traverse to the Marble Showers where it seems to be lost. The OFD book suggests that this might be connected with a long defunct resurgence in the Penwyllt area near SWCC headquarters. Significantly the tube cannot be traced beyond the Marble Showers area. My particular thought here is that later streams may well have converged at Marble Showers to obliterate evidence of the original phreatic tube and create the Marble Showers complex. If this is coupled with the fact that the only drainage from the South of the main stream comes in just below Marble Showers one might suggest evidence of a phreatic network with slight vadose influx somewhere south of the streamway. In itself I would not think that this series would lead anywhere, but it would be worthwhile to consider this in an overall exploration of the area.

A more likely bet is the drainage to the North of the main streamway. Dye tracing by Smart et al. a few years back indicated that the dry valley between Hobbs and the old tramway drained into Cwm Dwr. However some dye came in upstream of the confluence and was supposed at the time to come in from Splash Inlet. I am no longer really sure that it come down Splash Inlet, but at the time it was enough to send Alan Jackson and I scampering up the Oxbow Series while sensible folk were playing with banger and digging in Cwm Dwr. While the diggers were recovering from their banger headaches Jackson and I walked into an extensive new bit of cave and found the Splash Inlet stream flowing in a continuation of its vadose rift. There were signs of phreatic action but not enough to indicate a major influx. The eventual sump was reached trending Northwards, and has not been passed.

Further exploration downstream in Fault Aven series and Marble Showers has confirmed that this area has seen a complex series of hydrological events, further modified by the great fault in first river chamber. No-one can fail to be overawed by the enormous size of rifts and chambers in this part of the cave.

This brings me to a continuing argument I have with Bob Radcliffe who suggests that at one time Cwm Dwr Jama etc. formed the main drainage and hence the main stream when the Byfre sank further West. Therefore Cwm Dwr is a very important area for 'lost' parts of OFD. I agree with Bob - when I'm sober - that Cwm Dwr is a very important way on to new stuff, but one cannot neglect the evidence of an older major system in the area of the main streamway. What I would suggest is that much of the water now entering via various Northern showers into the main streamway was captured by Cwm Dwr Drainage at one time and that



O.F.D.I Cardy with Overhang

J.J.Rowlands

removal of the overlying gritstone has caused the streams to migrate and cut into part of the old partly phreatic series in the area from Marble Showers up to Splash Inlet. That is Stage 2 development if one subscribes to Paddy O'Reilly's theory of 3-stage development in OFD. This series would necessarily be high above the main stream and would probably extend into the area, which is blank on the map, between Cwm Dwr and the Oxbow Series.

Anyway this is all pure speculation, but next time I'm caving in OFD I shall be looking in that area. It is certainly worth a visit just to ARSE about. (N.B. ARSE is a sub-group of the Club:- Association for the Reintroduction of Serious Exploration!)

GARY JONES

UPPER KENDRICK'S CAVE GREAT ORME
EXCAVATIONS OF 1978

This cave is situated in Llandudno at SH. 7800 8284 at the top end of the owner's garden. Club members who may be interested in inspecting the active open trench should contact me on Penmaenmawr 3286. Excavation takes place most Sundays throughout the year, but a mid-week inspection can also be arranged. The site should not be confused with Kendrick's Cave itself, which is a large mined gallery situated 30ft. further down the cliff with a Victorian summerhouse built against it. This latter cave has been known since about 1879 and is monument No. 365 in the Caernarfonshire Inventory of Ancient Monuments.

Speleologically speaking the two caves are probably one large cavern in which freeze/thaw processes and later tunnelling at the bottom for copper ore have together resulted in a division into two openings.

Excavation has continued from March to December 1978, The three trenches described (AW 75, 20; AW 77, 16) having been backfilled leaving undisturbed three baulks, the Western half and rear of the cave. Trench No. 4 of 6 m² near the centre of the floor area has been opened reaching a maximum depth of 2.03 m below the modern disturbed cave floor.

No human and relatively few animal remains have been discovered, but the artifacts found have proved to be most important. A datum line has been surveyed in the cave and marked on the walls using a Hilger and Watts level.

Animals represented include sheep and goat, pig, wild boar, rabbit, very fragmentary unidentifiable bones of mammals larger than sheep; Apodemus sp. and Microtus agrestis (Field Vole) both identified by dentition.

Bird species - several are represented; frog bones;
Fish bones include vertebrae and operculum, possibly more than one species
Mollusca comprising oyster, limpets, mussels, periwinkles, cockles and at least three other unidentified species.

Artifacts include the following:

1. Left femur of robust sheep or goat, both ends hacked but

- one end polished by use
2. Three potsherds with indentations, but characteristics insufficient to provide a date; smooth and buff coloured on one side, black and gritty on the other, $9\frac{1}{2}$ mm thick.
 3. Flint knife, honey- yellow unpatinated, 68 mm long, taken to be Neolithic although there is secondary working (blunting) along 14 mm of its narrow end (fig.3).
 4. Flint core and spalls, unpatinated.
 5. pebbles, including one of sandstone with score marks indicating use for "gentle" battering, perhaps in flint tool manufacture. (fig.4)
 6. Male wild boar right mandibular canine (or tusk) with tip rubbed flat, quite unlike normal wear facet, two of which were also present (fig.1).
 7. At 2.3 m below cave datum a small canine of wolf with the root pierced and decorated with a number of transverse lines. Only nine pierced and decorated teeth are at present known from Britain (all in the British Museum) and all are bovid or cervid. The whole of the decoration cannot be seen due to a stalactite incrustation. Dr. J.B.Campbell places such artifacts in the Earlier Upper Palaeolithic (class II HA2), but further evidence is required before such an early dating can be accepted here. The earlier teeth came from Kendrick's Cave (Caern. Inv. Vol. 1 No. 365) ca. 1880, and the question now arises which of the two caves yielded these 19th century finds (fig. 2).

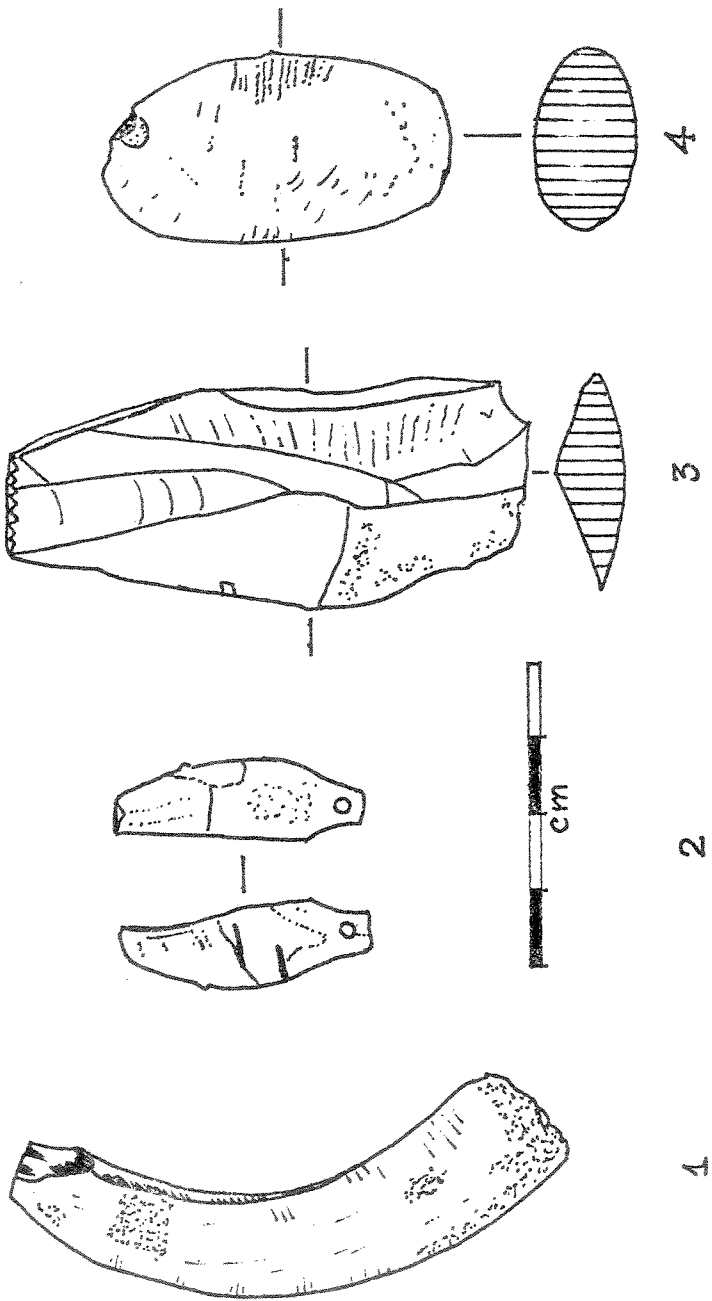
Stratification. This is now becoming clear in spite of massive disturbance in the 19 C. by the construction of stone walls and artificial floors. Judging by the rubbish accumulated on the cave floor there was at least one window built inside the cave complete with wooden frame, and the west entrance seems to be entirely man-made with the aid of drilling and blasting. Contamination of the upper archaeological layers is thus to be expected and the extraneous items found include coal, glass bottles and window glass, dressed slate, china, wood, iron, iron chain, brass curtain rings, and fragments of clay pipe. Some of the latter have worked their way down up to 2 m.

Some of the uneven hard stalagmite had caused trouble to the 19th C. inhabitants who had laid their beaten clay floors carefully to fill hollows in it rather than break it up. A compact undisturbed midden was found in brown cave earth contained in a hollow in the stalagmite floor. It consisted of a mixture of charcoal, molluscan and mammalian food remains which could be analysed as a unit and then stored for future examination.

Details of the stratification to a depth of 2.71 m below cave datum may be enumerated as follows:

1. Rubble of bricks, dressed limestone and slate containing contaminants as described above.
2. Beaten reddish-brown clay so flat it may once have been covered with ceramic tiles carefully laid, but removed when modern occupation ended early this century.
3. Greyish lime floor with black flecks, usually with a flat surface. This material may possibly represent a 19th C. living floor composed of a form of lime mortar or debris cast out from nearby lime-kilns.
4. Modern brown earthy humus occurring only on one side of trench

UPPER KENDRICK'S CAVE



4. It is up to 30 cm thick, has cut timbers laid in it and may represent animal feed, animal bedding, or even peat for fires. It is certainly entirely organic in composition. The foundations of the 19 C. walls reach down to it but rest on the next layer where it is absent.
5. Stony brown cave earth, root disturbed, in part stalagmited or "brecciated" to use the term applied by earlier authors, and very loose where stalagmite is absent. The stones in this layer are sub-angular and generally less than 30 cm in size. The stalagmite may be so concentrated that the stones are virtually absent from it. These changes are believed to reflect changes in the rate of stalagmite growth, a factor greatly influenced by climate. The layer contains Neolithic/Bronze Age pottery and flints.
6. Angular limestone blocks, sometimes over 30 cm in size, with a little loose brown cave-earth. This is a cavern-collapse feature resulting from freeze-thaw processes in a climatic regime much colder than today's. This layer contained bone fragments and the decorated wolf canine and is presumed to correlate with the Upper Palaeolithic period, although this has yet to be confirmed by typical flint tools or a radio-carbon dating.

It is intended to extend the trench westwards but to leave undisturbed areas of cave floor to the North and South.

MELVYN DAVIES

Nature Conservancy Council, Bangor

12th January 1979

References.

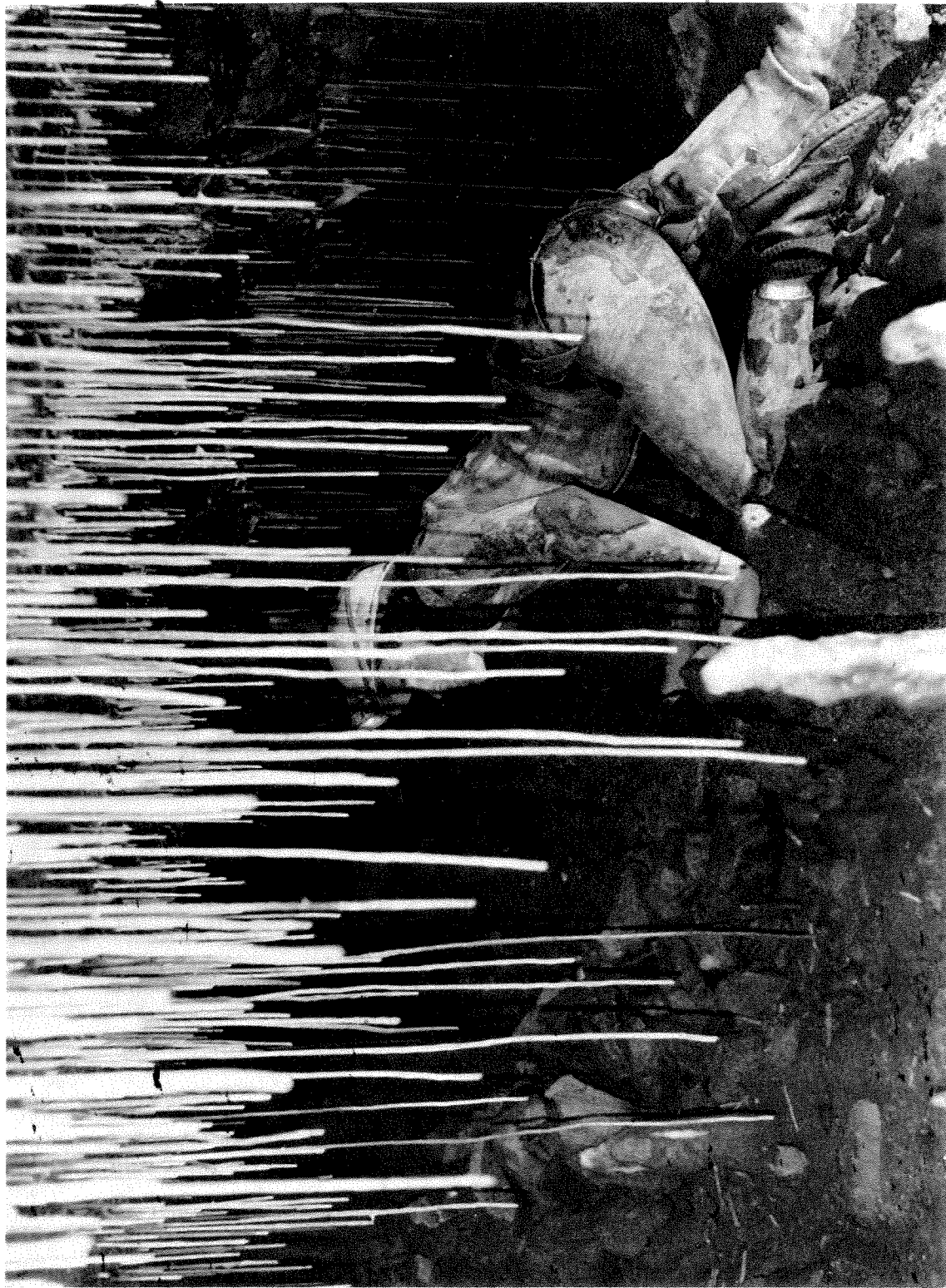
AW - Archaeology in Wales, an annual review published by Group 2 (Wales) of the Council for British Archaeology: 1975, No. 15, 20; 1977, No. 17, 16.

William Pengelly Cave Studies Trust Newsletter, No. 31, 19-21, March 1978
North Wales Caving Club Newsletter No 60, December 1977

Book Review:- Caves of South Wales by Tim Stratford.

At last a new guide book to the caves of South Wales is available. Written by Tim Straford and published by Cordee, the work represents the only available guide since the 1967 edition of "Caves of Wales and the Marches". All such books are destined to become outdated and the author brings us up to date with information regarding the new systems, and equally important, access.

Glued and bound with a reinforced cover, the book is of a convenient size to wear well, and essential pre-requisite of any guide. At first glance it may appear a little slender - 92 pages - but this belies the content; fine small print on a quality paper. The presentation is excellent, enhanced by very good reproductions of Ian Davidson's black and white prints.



B.T Jorgensen

STRAW CHAMBER

DAN YR OGOF

There are very few spelling mistakes, and the only factual errors concern Ogof Cynness and Blaen Hepste Holes. The former was first explored by a member of Hereford Caving Club (myself) in 1967. The latter has no connection with Tuck's Rift. There are a number of other minor points that might be raised. A wet suit is more than "advisable" in Ogof Rhyd Sych - it is essential. Again, since it is a popular system, it would probably be better to emphasise the rapidity with Little Neath River Cave Floods. On the other hand the whole of Llygad Lluchwr is accessible under all conditions.

Very helpful are the index to caves at the back, and the sketch maps showing entrance locations. However I feel that simple line surveys of several of the larger caves would have clarified their layout and given a better sense of scale. As it stands lengthy descriptions of places such as Agen Allwedd leave one confused. If cavers seriously consider the question of grading then Ogof Craig y Ffynnon ought not to be grade 4 but grade 5. Several systems lack a grading altogether: Ffynnon Garreg Fawr for example being a severe grade 5.

All in All it is of course very easy to pick holes in any piece of work. Clearly this is a quality book and good value at £2.75. It fills a large void in caving literature and I feel that any caver with an interest in the area will buy a copy

MARTYN FARR

Book Review:- Grottes et Canyons - Les 100 plus belles courses et randonnées. by Pierre Minvielle
Published Editions Denoel, Paris (1977)

As its sub-title suggest this book sets out to provide a guide to the 100 most attractive routes and excursions in French caves, and with sporting originality a few gorges. The reader's first impression is that this is no ordinary guide book. It is beautifully printed on Heavyweight glossy art paper and copiously illustrated with photographs both black and white and in colour, simplified surveys and several line drawings. A nice touch is the inclusion of numerous photographs lithographs and gravure prints of historical interest. The book is sturdily bound within a substantial hard cover and is one of a series produced under the direction of Gaston Rebuffat. The other titles take climbing and hill-walking as their themes, describing 100 excursions in each of the areas covered.

The text is in French but is written with a considerable economy of style - particularly the descriptions themselves - and printed in a clear and open typeface. It positively invites the reader's attention and should provide little difficulty to anyone armed with 'O' level French and a knowledge of caving.

Before embarking on the descriptions the author devotes a few pages to bringing the uninitiated reader up to speed. And he does so in a truly Gallic style. One can almost hear the subdued strains of the "Marseillaise" in the background as one browses through the first four short chapters:-

Why go caving?

'Conquest of the chasms.'
'How to go caving.'
'The ten most famous French cavers.'

Stirring Stuff indeed, but it does indicate some fairly basic differences between the British and French Views of Caving.

The author's views on 'Why go caving?' are concerned with the aesthetic and spiritual appeal of the pastime, its marvellous combination of things philosophical and things practical. A touch of national pride creeps in as he concludes that France is indeed the best place to go caving; a veritable caver's paradise indeed. As it happens this is no idle boast. Having drooled over the photographic evidence I am inclined to agree!

'Conquest of the chasms is a charming potted history of caving in France E-A Martel is duly lionised as the father of modern spleology, but 'La Gloire' is spread fairly evenly over numerous other equally famous names.

'How to Go Caving' shows commendable brevity in dealing with caving equipment and the do's and dont's of caving. A few words on technique are chiefly aimed at underlining the safety aspect. Notes are given qualifying the use of the cave descriptions. Sure to raise a smile is the remark - "Indications of recommended equipmest assume that a lamp is used when you go underground".'

A grading system is used to indicate the degree of difficulty of each trip. These range from 'easy' to 'very difficult' in five stages (based on an interesting 'Points' system) with additional suffices indicating 'slightly less than' and 'slightly more than'. Since Gouffre Berger and several other 'epics' are calssed as 'very difficult' the gradings should not be translated literally. The author's v.diff. seems to be out severe of super-severe standard.

Who then are 'The ten most famous French cavers'? Armand, Bourgin, Casteret, Chevalier, Fournier, Geze, de Joly, de Lavour, Martel nad Trombe. Alphabetical you notice, It would take a brave man to rate them otherwise.

Each excursion has an introduction which immediately places the cave or canyon in context with local topography, and gives a precis of the excursion, mentioning particular highlights and dangers. This is followed by a brief history of exploration up to the present day. Statements of grade of difficulty, duration of the trip and equipment recommended, including clothing are followed by useful advice on location and appraoch; but no grid references or altitudes are given.

The actual descriptions are of the usual 'blow- by blow' variety with enough adjectives and dimensions added to give a clear enough impression of the nature of the trip. Starting with a relatively easy walk of 16 km through the Grand Canyon du Verdon, the excursions increase in difficulty No. 100 is the descent of the Gouffre Berger to the sump a 1122 m depth. Caving trips vary in duration from 1 hour (Grotte de St Pierre) to 60 hours (Padirac).

Choosing a trip which I remember well, No 51 Grotte de Gournier, enabled me to test the usefulness of the text. The topographical notes

gave just the right amount of information to relate the cave to its prime feeder sink (Grotte de Bury) and its neighbouring resurgence caves (Couffin and Chevaline) in the Cirque de Choranche. The historical notes seemed adequate. The grading of rather difficult and a six hour trip would be about right for a party with moderate experience.

The description of the underground trip corresponded with my own recollections almost exactly. This implies that the author is giving attention to salient points, not cluttering up his explanation with trivial details. The accompanying survey elevation and colour photographs considerably enhance the description.

To the minority who deplore guide books to caves in whatever form this book will offer a prime target for abuse. It definitely encourages the reader to go caving. It also suggest where the best pretties may be found, by word and by photographic illustration. Some French caves enjoy a level of vandalism we can scareely imagine. Ever looked for the gupsum flowers in La Cigalere? I wonder if Casteret's publication of their existence had anything to do with their demise.

Putting aside philosophical arguments, this book is a gem. As a field guide its use is limited since it is too large and of such a high quality that it is unlikely to be moved very far from the owner's bookshelf. But as a high class menu to a truly ravishing choice of dishes it succeeds without reservation. I f you cannot read French just read the pictures, they are superb.

I have often wondered why British cavers insist on travelling thousands of miles for a caving holiday when France is just next door. After reviewing this book I am even more perplexed.

I am indebted to Denise Samuel for being kind enough to lend me her copy of this book for review.

TONY KNIBBS

I am grateful to Tony Knibbs for permission to reproduce this review which appeared in the Mendip Caving Group Newsletter. A copy is kept in the SWCC library. Editor.

FOUR EARLY COMMENTS ON PORTH YR OGOF
which

"Near this fall is PorthogoCavern through/the river Vendre runs. The water was too high to admit our entrance; our conductor, however, i informed us he had penetrated about half a mile, but found the river wind in so many ways he judged it safer to return, lest he should share the fate of a poorman who lost himself in this cavern for the space of three days. On our return a very intelligent gentleman staying in the neighbourhood recommended us to descend a steep mountain, on our left to survey a curious quadrangular strata of marble in the rock below. This strata in Welsh is called bwr maen which signifies a stone bowIt is situated close to the river Dynnas, which, forcing its way through some broken fragments of the rock forms a cascade a little above. The price offered for this grey marble in London is fifteen shillings a square foot."

from Whittaker's "Cambrian Tourist" 1828

"This remarkable cavern is entered by a horizontal aperture twenty feet high and about fifteen yards wide, leading into a very spacious apartment with a vaulted roof, from which hang stalactites and other calcareous concretions, which on the introduction of lights exhibit brilliant and splendid reflections of numberless hues: The floor is strewn with large masses of broken rock, scattered about in all directions and in many parts presenting almost insurmountable obstacles to the progress of the visitor. Through this cavern the river Mellte pursues its course, rushing over the rocky fragments which obstruct its progress, and near the centre of it precipitates itself from a very considerable height into a deep abyss, where the roaring of the cataract and the darkness of the cavern tend to excite a sensation of awe. At the distance of a few hundred feet the river re-appears and in time of floods bursts out with prodigious force."

From Lewis's "Topographical Dictionary of Wales" 1833

"A short way above the rude little village of Ystradyvelte, four miles above Pont Neath Vaughan, (where there is an inn kept by Watkin Davies, a guide) the river Melte disappears suddenly. Its underground course can be traced on the surface, which is always swept by floods; and it re-appears in a vast cavern called Porth yr Ogof, which cannot be safely explored without a guide, who provides candles for visitors. The entrance to this darksome passage is 43 feet high and 19 wide, and forms a striking rock scene. Here during the floods which sometimes rise and rush in angry torrents down the vale after only two or three hours heavy rain on the hills, the recoil of the water is awful, - large trees are dashed against the rocks, and ultimately forced into the winding depths of the cavern. In the month of June, 1842 when the Melte was exceedingly low, we succeeded in penetrating more than 500 yards through occasionally by the side of the stream, as far as the 'White Cave', a point which our guide Walkin Davies had only succeeded in reaching once before. Here we saw a light gleaming through an aperture at some distance from us; and as the water is deep, it is, we were told, impossible to proceed further. The fatigue is great, as it is necessary to assume a stooping posture for most of the distance."

From Cliffe's Book of South Wales 1848

"We penetrated about an hundred yards, as far as any glimmering of daylight from the mouth directed us; and this specimen of Stygian horror was amply sufficient to satisfy all rational curiosity."

From B.H. Malkin Scenery, Antiquities and Biography of South Wales 1804