

**SOUTH WALES
CAVING CLUB**

NEWSLETTER



SOUTH WALES CAVING CLUB

No. 73

NEWSLETTER

August 1973

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Cover photograph - Selenite Passage, Ogof Fynnon Ddu II
taken by B. T. JORGENSEN

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HAZARDS OF COLD WATER

Summary of the Paul Esser Memorial Lecture,
delivered on 14th February, 1973
in the University of Bristol by
Professor W. R. Keatinge

Some of the most exciting sports are the dangerous ones, but the risk becomes quite small if the hazards are understood. Of all these, water sports take the greatest toll of human life: about 1,000 deaths in a year around Great Britain, compared with about a dozen on the mountains. Death from shipwreck results more often from cold than from drowning. Old-fashioned equipment was designed to provide flotation rather than to protect from the cold, but ideally both should be provided. Since the last war much research has been devoted to studying body-cooling of volunteers, measuring core temperature by electric thermometers. These give most reliable measurements when swallowed to lie just behind the heart.

Body Cooling

Thin men cool faster than fat men, because the layer of fat insulates the body core. The cold causes the blood vessels in the fat to shut down. Channel swimmers are usually fat. The usual summer sea temperature here is about 15°C. At this temperature fat men have a distinct advantage over thin. For thin men the critical water temperature at which heat balance is possible is about 20°C, for fat it is 10°C. Below these temperatures the rate of body-cooling is uncontrollable, even by shivering. The rate of body cooling can, however be reduced. Firstly, keep still, because exercise in water (unlike air) always accelerates body-cooling, if the water is cold enough to threaten life. Secondly, keep on as much clothing as possible, as this will slow down the rate of cooling.

The same principles apply to children, who often seem to be able to tolerate cold water better than adults. This is an illusion. They cool more rapidly, both because they are usually thinner and because they have a larger surface of skin in relation to body weight. Girls generally cool more slowly than boys, because they are fatter. In one experiment one boy cooled as much as 3.2°C in 33 minutes. All the children who looked really cold were found to have core temperatures of less than 35°C (normal is 37°C), which is a fairly serious degree of hypothermia.

Cold Vasodilatation

At temperatures near freezing point the protective shut-down of blood vessels in skin becomes reversed due to paralysis of their muscular walls. The resulting vasodilatation accelerates cooling, particularly of the hands, from which heat pours out of the body. The practical answer to this is a wet suit with gloves. Whales and seals do not get cold vasodilatation at low temperatures, and so their blubber will always protect them from heat loss.

Sudden Sinking

Professor Keatinge quoted the case of a young athlete out sailing in the winter on a reservoir, when his boat overturned. He only had 50 yards to swim to the shore, but after he had got half way he shouted that he couldn't go on and sank. Cramp may be ruled out, as he was in good training.

Study of skin reflexes to cold shows that respiration is accelerated, and air is not expelled from the chest as fully as usual. The heart accelerates, the cardiac output doubles and the blood pressure goes up. Possibly the over-breathing in choppy water might cause water to be inhaled; but a more important finding was that irregularities of heart beat occurred (ectopic ventricular beats). These occurred in 10 to 15% of subjects on being immersed in cold water. After a few minutes these irregularities ease off, because the nerve endings in the skin adapt to the cold. None of these things accounted for the sudden sinking of the lad in the reservoir, so it became necessary to design an experiment under controlled conditions, which would imitate the circumstances.

A good swimmer dressed up and got into water at 4.7°C and started to swim, but within 90 seconds he sank and had to be pulled out. We were shown a film of the next swimmer repeating the experiment. First we saw him overbreathing, due to the cold water on the skin. When he began swimming he was holding his head high out of the water, which is tiring. He quickly began to get exhausted and to make small mistakes. After 7½ minutes he had to stop and be pulled out. On the bank he was utterly exhausted but within 1½ minutes was talking cheerfully. "I don't know why I couldn't", he said, "I just got exhausted; I couldn't go on".

The explanation why cold water is more exhausting than hot is very simple and has nothing to do with hypothermia. This man had no drop in core temperature. It is that cold water is stickier (more viscous) than warm; it is like trying to swim in treacle.

Practical Advice

Always wear a life jacket when sailing. If you have to abandon ship on the open sea make sure that you are fully clothed (or wear a wet suit), don't exercise yourself but keep afloat until rescued. The natural thing is to swim about. This is one case where the natural thing is the wrong thing to do. If you are caught in cold water without a life jacket do not swim for shore; cling to the boat until rescued if rescue is on the way.

When a subject appears to have died from hypothermia, do not despair. Plunge him if possible into a bath of water as hot as the hand can stand. This is a life-saving measure if done early. The hot bath should not be continued after a satisfactory heart beat and respiration are restored.

Alcohol taken before immersion in cold water does not noticeably accelerate heat loss and makes the ordeal more tolerable. On the other hand, if taken after two hours of exhausting exercise, it can cause a dramatic fall in blood sugar, which eliminates the ability of the body to control temperature, and so may be lethal. So if you take a hip flask up a mountain, take some sweets as well.

O. LLOYD

CLUB NOTES

1. We welcome as new members:
Garry D. Freeman, 49, Kenilworth Avenue, Wimbledon, London, SW19.
Kitty Hall, 16, Fore Street, Hatfield, Herts.
Phil and Marilyn Stone, 35, Hope Street, Halesowen, Worcs., B62 8LU.
David A. Wolfenden, 83, York Road, Kings Heath, Birmingham, B14 7RY.
2. The following members have had address changes, not previously circulated to members. They are however incorporated in the address list of this newsletter.
Ginny Brooks, John Dearden, Gerry and Sheila Eldridge, Colin Fairbairn, Bruce and Jane Foster, John Harvey, Rex Hendricksen, Brian and Marge Jopling, Fred Levett, Glenda Pattensen (formerly Keen), Ashford C. Price, Mrs G. Price, Bob and Angela Radcliffe, Jem and Terry Rowland, Penny Tutt, Derek Watson.
3. The following members have been accepted as leaders for Ogof Ffynnon Ddu I:
Gareth Davies, Gary Jones, Pete Ogden, Frank Salt, Mike Ware.
4. Congratulations - some belated
to Bill Little and Elsie Wilcox on their engagement,
to Eric Inson and Jill Stevens on their marriage,
to Ken Maddocks and Alison Stone on their marriage,
to Clive Jones and Claire on their marriage.
Best wishes to Eileen on her marriage to Dr. Evans.
5. Hut Fees:
After due consideration the Committee decided to increase the hut fees applicable to members and non members. The new rates, now in force, are per person per 24 hours or part of 24 hours:
Members: 15p each
Visitors: 25p each.
6. Resignations:
John Kingdom has resigned his membership of the Club.
7. Members are becoming slack in signing out keys and returning them promptly. Recently keys to several caves have gone missing and in some cases locks have been changed, only for the keys to turn up again several weeks later and the locks then needing to be replaced. This causes unnecessary work and expense for some of us. Please always sign out the keys you borrow and return them the same day when you return to the headquarters.
8. Keys to the HQ. These are kept with Miss Williams and they should be returned to her at the end of each weekend, or if the HQ is being used mid-week, by the person who is last to leave. In particular the last person

to leave must ensure that all the buildings, including sheds and coal place, are locked. There have been several instances of doors not being locked. Also when equipment has been used, it should be replaced, not just left lying around for someone else to replace.

9. It is hoped to arrange a camping week-end during September at Green-Cwm, Parkmill, Gower. This will provide an opportunity for members to visit Llethrid and Tooth Caves.

RECIPROCAL RIGHTS

The Committee has arranged that our Club and the Cave and Crag Club shall have reciprocal rights regarding the use of the respective club huts. This means that our members may use the two huts of the Cave and Crag Club at their members' rates, which is 10p per night, but previous booking must be made through their hut secretaries. Details are given below:

PANT IFAN (North Wales)

near Tremadoc (Map ref. 107/570 408)

Track from Prenteg

20 beds. No blankets.

Electric light. Calor gas cooking.

Fees: 10p per night, members.

Hut Warden: A. Smith,
56, London Road,
Canwell,
Sutton Coldfield,
Warwicks.

ALSTONFIELD (Derbyshire)

Rear of George Hotel,
Alstonfield.

20 beds. No blankets.

Electric light. Calor gas cooking.

Fees: 10p per night, members.

Hut Warden: B. Higgins,
1, Abberton Close,
Halesmere,
Lapal,
Halesowen,
Worcs.

CAVE RESEARCH GROUP OF GREAT BRITAIN

Members may be interested to hear that there is a proposed merger between the Cave Research Group of Great Britain and the British Speleological Association. No final details are available yet, but there were two open meetings last year for members of both organisations to put forward their views.

TAKEN FROM A LETTER CIRCULATED BY
THE CAMBRIAN CAVING COUNCIL

Subject: The contamination of the public water supplies at Penderyn

Most cavers and many other persons living in South Wales will have already seen, read or heard about this unfortunate incident on the radio, T.V. or in the press, or may have suffered directly as a result of it.

The Conservation Officer and myself have both been contacted by officials of the Welsh Industrial Estates Corporation, which manages this pumping station, which supplies some one and a quarter millions of gallons of water daily to the neighbouring villages and factories for the past thirty years or so, no matter what the state of the weather, from an underground natural reservoir via a borehole about 180 ft deep.

The contamination resulted in the supply of water to the community being stopped, until it was ascertained what was causing it (it was later found to be fluorescine), and entailed pumping out several hundred thousand gallons of water to waste into the River Cynon to try to flush out the affected water. It also meant that villagers and factories were without water for this period, and they had to be serviced by water-carts for this period for domestic needs. In one case, a man on a kidney dialysing machine had to be rushed to hospital, as that water could not be used to operate the apparatus. Some water was restored on June 13th, but under reduced pressure and to limited areas. Two waterboards were affected, the West Glamorgan Water Board and the Taff Fechan Water Board. The cost of the disturbance is likely to run into thousands of pounds.

As yet it is not known who was responsible for the contamination, but it is presumed that the most likely persons would be cavers doing water-tracing tests. For years efforts have been made, unsuccessfully in this area, to trace the passage of water sinking in caves and swallow-holes, and there is no doubt that this freak and unexpected result was due to an unusual combination of factors, as the site had been dyed many times before by cavers without success. (On the Mendips this technique has been used with great success by cavers, in close consultation and co-operation with the water authorities, to trace water supplies and also contamination of these supplies.

Whilst it is appreciated that there is no harm in the dye, it is very disconcerting to the public, and more than a nuisance to the water engineers, as it seriously affects the chlorination-testing, which depends on a delicate pink colouration, which would be masked by the colour of the fluorescine, and therefore could not be effectively controlled. It will also cause some adverse feeling against cavers in the locality, because of the disturbance caused, unexpected as it may be, but nevertheless preventable in the future. Such happenings could also prejudice any negotiations being made with other authorities locally. It is important to advise all the caving fraternity of this happening to prevent any repetition of it. THIS TEST MUST NOT BE REPEATED.

On Wednesday June 13th, our chairman, Bill Gascoine, acting on his own initiative in an area which he had not been to before, did a 'sweep' and located the site, removing several bags of fluorescine suspended in the entrance passage.

As it was not known how many bags were placed there, he could not be sure that all were removed. A further investigation will be necessary at the weekend to ensure that there is none left.

The Authority doesn't wish the name or grid reference of the site to be published in this connection, and this wish must be respected, as they do not wish the knowledge to fall into the hands of undesirable persons. The site is well-known to many cavers who frequent the area, particularly as it has never yielded positive results before. Further to this, no water-tracing dye tests should be made in the vicinity of Penderyn at levels above that of the pumping station at Pontbren, Penderyn. It is situated at 720'ft A.O.D. with the depth of the bore hole about 180 ft, but the extraction is at a higher level. The Authority would be satisfied with a level of 600 ft.

The advice could also be applied elsewhere in Cambrian limestone regions, where private or public water supplies are abstracted, to prevent any further repetition of another incident like this. It would be better to seek advice first, and this would go a long way to establishing good relationships with the respective authorities, to whom we could be of service, and also to prevent creating an adverse public image.

F. S. BAGULEY
HON. SEC. C.C.C.

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IF YOU HAVE ANY WORTHWHILE CAVING PHOTOGRAPHS PLEASE
SEND THEM TO THE EDITOR. ENSURE YOU WRITE YOUR NAME
AND LOCATION THE PHOTOGRAPH WAS TAKEN AT ON THE
REVERSE IN PENCIL.

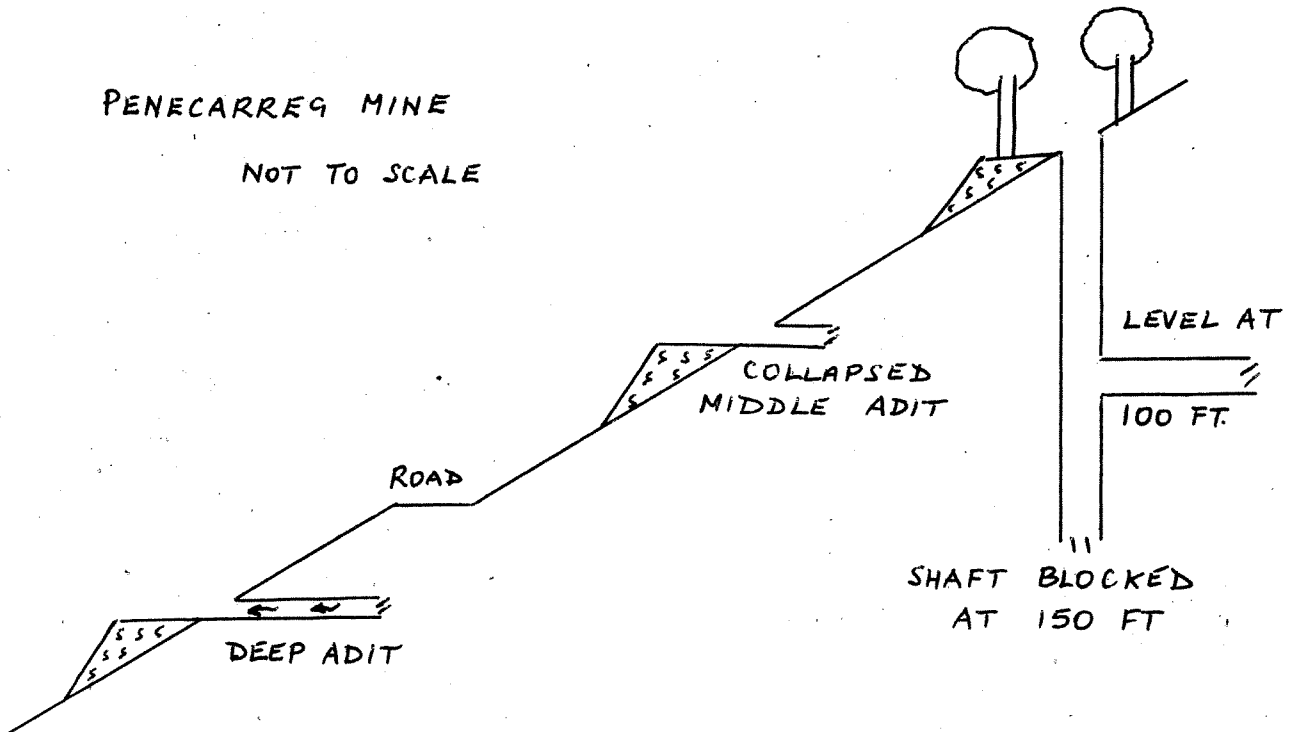
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SOME RECENT MINING INVESTIGATIONS

During August 1972 Roger and Elizabeth Flaherty reported that they had found an open shaft, some collapsed adits and a deep, open, completely water-filled adit, just outside Talley in Carmarthenshire. The shaft was found to be 150 feet deep. Apparently the mine, which is called Penecarreg, worked lead and silver.

An eager party of four, consisting of the Flahertys, Pete Francis and Bruce Foster departed from Penwyllt on August Bank Holiday Saturday with most of the Club's ladder. On arrival at the mine it was agreed that the first course of action would be to dig a trench at the deep adit, so that the water level would be lowered sufficiently to permit access. We thought this would only take a few hours. By the end of the day all that had been revealed by four absolutely shattered "navvies" was an 18" airspace. Exploration of the vast mine workings would have to wait until the next day.

The Sunday saw us complete with wet suit, rubber inner tubes, spare lights (note), food and miles of rope and ladder, gazing disconsolately at a very solid roof fall, about 470' inside the adit. The next step was to try the shaft, this was certain to go. It did! About 100' down we found a level which we gained access to by swinging the ladder and throwing a lasso around an old tram. The tram is a very fine specimen made of wood with an iron chassis and strengthening bands. Along the level around a corner and another roof fall. Ha, well, back to the ladder and continue down. The bottom of the shaft was obviously not the original bottom, polythene bags, old trees and the inevitable sheep, but no way on.



The weekend was concluded by a half day at Nantymwyn to remind ourselves that worthwhile mines really do exist and by a fruitless hunt at Cwm du, which is again not far from Talley, where there was supposed to be some mines. Unfortunately we only found brambles and soggy bog.

A hiatus followed until this spring, when a dog belonging to the farmer who owns the land above Penecarreg Mine fell down the shaft. A party from the club turned up and Gerry Wolff descended the shaft, to find the dog alive and well, in fact on reaching the surface it ran off quite happily. The farmer was overjoyed at this and suggested we dig near one of the collapsed adits, through a stone wall. He said he believed the wall was the sealed entrance to an adit, however half a day's work showed that this was not in fact the case. The wall had probably supported a crusher or some other machinery.

The next weekend we decided to dig at a collapsed adit slightly above the machine foundation, it looked very promising. Five hours, some hard shovelling, a boxfull of cakes and 6 lbs of 'Banger' later we decided maybe it wasn't so promising after all. We do not know what happened but we had probably dug right through the old adit, which had collapsed further back than we expected! The ground is very loose and will require shuttering if any more work is contemplated here.

In April a party also visited Cynnant Mine, N.E. of Rhandirmwyn. This was a small private venture to which we have made a previous visit in 1967 when we had been turned away, for at that time the mine was still working. On this occasion we gained access but found no more than is mentioned in G. W. Hall's book - 'Metal Mines of South Wales', all of which was in an obvious state of abandonment.

Casara and Gilfach, near Myddfair were also visited in April, one drainage adit at Casara was followed for 200' to a roof fall. The adit starts at the foot of a little hill, below Hill's Engine House and the fall appears to be under a nearby road. The farmer (that endless source of information) at Gilfach told us that the road had collapsed there recently and it had taken half a lorry load to fill it. Again we found no more than is mentioned in Hall's book, except that little is left of the waterwheel and its pit for a tree has recently fallen across it.

BRUCE FOSTER



One of several entrances into the abandoned slate mines at Cwm Orthun in the Moelwyn Mountains of North Wales. The mines are well worth a visit, especially during the sort of 'wet' day that only North Wales can produce. The usual care should be exercised in the vicinity of old timber supports etc., but the mines do not contain any dangerous shafts. Apparently the slate was removed from beneath a granite dome; this has left huge chambers connected by comfortably sized passageways.

B. T. JORGENSEN

CAVING IN MALLORCA (MAJORCA)

Mallorca, roughly 40 miles by 50 miles, is composed of comparatively recent limestone deposits and would apparently be a favourable situation for the development of caves. Indeed most people have heard of the island's large tourist attraction, the Caves of Drach. Further analysis of the widely circulated tourist map (Firestone Hispania) reveals four additional tourist caves together with a general scattering of other 'undeveloped' caves.

The island basically consists of two mountain ranges running SW-NE, separated by an area of low undulating agricultural land. The Sierra Norte to the west rise to over 4,000' while the Sierra de Levante in the east, lie generally around 1,500'. Rainfall, usually regarded as low, rises to about 45" in the Sierra Norte and about 30" in the eastern mountains. Given these general conditions one could expect the island to produce some extensive systems.

Geography, that all encompassing of subjects, here proved open to favourable interpretation and while the inspired members get on with the job of a land use survey (Palma), the caver made for the hills. Thus a scooter was hired and the Welshman rattled hazardously through the centre of Palma - over the Sierra Norte to Soller. Here large perennial springs were rumoured to exist. (It was thought better to try and concentrate on the exploration of any resurgences - partly due to accessibility but also because there seemed to be virtually nothing obvious in the way of sinks or surface depressions. Surface flow (in the 'torrents') was surprising, but this was the end of the moist season, i.e. Easter.

At Soller the very limited literature told of one Cova del Estudiants, a spring supposedly utilised for irrigation purposes. This cave (Soller Sheet, Edition Militar No. 670 1147,3. 592,7) in the valley floor, is obvious from the road leading to Palma, and is situated on the extreme outskirts of the town. Several other very large risings were noted upstream, on either side of the river bed, but all were impenetrable or rose through boulders. The cave itself discharges water infiltrated in the Sierra de Alfabia and supposedly reacts rapidly to heavy precipitation. There were two entrances, a 1.5 metre tube issuing the stream and a fossil entrance about 2 metres in diameter. After 7 metres the passages converged and continued a further 10 metres to a large, crystal clear, warm, shallow sump. A five metre area near the entrance led nowhere.

No other caves were found in this area though a resurgence that might warrant examination was noted at 1144,5. 589,5.

The Comonet area was the next to be visited. The cave here (tourist attraction) lies in the foothill zone at the southern edge of the northern Sierras (Inca Sheet, No. 671 1168,8. 598,2). It consists of two very large chambers each over 75 metres x 25 metres, linked by a slightly smaller entrance chamber. Generally parallel to the cliff face, the cave lies approximately 10 metres above the flat valley floor - in Triassic rock. The system is dry with apparently very little evidence of past water flow. It was presumed to be phreatic in origin modified by extensive roof collapse. The abundant formations were extremely well developed with several pillars over 8 metres high. It seemed very unlikely that any extensions would be made here.

As a show cave it was relatively undeveloped i.e. no coloured lights. However taped light orchestral music (old Cliff Richard numbers) had been adapted. Both cave and site possessed potential for future tourist development.

The main branch of the Torrent de Sant Miguel (flows in the adjacent valley) was followed to its source, almost exactly due north of the cave. This comprised an impenetrable spring issuing from the valley floor (1168,7. 600,0), but fortunately an abandoned resurgence was found in fairly dense woodland about 20 metres away. This cave in a small bluff comprised a rift, initially 2 metres x 1 metre, leading steeply down to a sump - after a horizontal distance of about 15 metres. The sump was about 8" wide but appeared to open beyond the squeeze.

The last cave actually visited was the show cave of Genova, about three miles west of Palma, in the foothill zone of the Sierra Burguesa. The show cave is about 150 metres long found by accident in 1906 whilst digging a well in the floor of a fossil torrent. The passage, phreatic (?), about 2.5 metres high on average, looked as though it went nowhere promising and no water was seen or heard, despite a depth of 20 metres being reached. The lighting effects were good - and no music! There appeared little potential for increasing its tourist capacity.

More promising from the caving point of view was the rumour of deep holes (formed by collapse?) in the nearby mountains. Heavy rainfall however, meant that I got wet.

Other caves on the island worthy of mention are perhaps:-

The show cave of Drach near Porto Cristo on the east side of the island. Martel found extensions here in 1896 and attributed the cave to marine erosion - a theory not held today. There is reputed to be over 1 mile of passages open to the tourist and its depth reaches 30 metres. Lying close to the coast, investigations have shown that the underground lakes (said to be the largest in Europe) are slightly saline, thereby indicating that there is some connection with the sea.

Further north along the coast, about $2\frac{1}{2}$ miles from Porto Cristo are two small (undeveloped) caves, the Cueva del Pirata (Pirates Cave) and Cueva del Puente (Bridge Cave). Each is reported to be about 33 metres deep and to end in a small lake. Martel described Lake Victoria at the end of Bridge Cave as one of the most entrancing landscapes he knew.

The caves of Hams (Tourist) and Tomasos - about $2\frac{1}{2}$ kms from the sea, near Porto Cristo.

The Cave of Arta, further north in a Jurassic anticline - is celebrated for its large chambers, over 33 metres high and well developed formations.

There are also caves in the south east - at Santueri, near Felanitz and north of Santa Maria at San Pou.

Of the islands' dolines, (which appeared to be something of a rare feature), a particularly large example was said to be the 'Pla de ses Basses' on the Peninsula of Formentor - in the extreme north of the island. It is said to have several openings into the ground, the largest of which is called L'Avenc Gran, and

is found in the centre of the funnel. The feature is in shattered Jurassic limestone. Within 500 metres of the doline is an abyss, some 25 metres deep with a freshwater supply at the bottom. A connection has been traced (using dye) between this and the Pla de ses Basses.

So - an overall impression of the place? It doesn't warrant an expedition, but there is obviously something worth exploring. The sump at Soller is a certainty to go, but the rest of the northern Sierras was rather disappointing. Perhaps the answer lies in the eastern area. A mile of passage - must lead somewhere! Apart from these, the Formentor Peninsula and the Genova area are perhaps the two best possibilities.

On the other hand of course there's sun, sea and sand - if you can fight your way away from the lure of the cheap booze, through the camera toting flocks of grannies and all the others you thought you'd left at home. It was quite enjoyable then - except for the vivid similarities to the return from Han-Sur-Lesse.

MARTIN FARR

TWRCH DYE TEST

This was set up to test one of the predictions of the article on underground drainage around the Twrch in the Feb. 73 Newsletter.

On 24th March 73 half a kilo of fluorescine was placed in the more easterly of the two sinks on Carreg yr Ogof 781216. Five activated charcoal tracers were placed at the following locations:

Sawdde Fechan
Twrch Fechan
Nant Llynfell
Ffryddiau Twrch
Ffrwd Las

Eight days later, after a moderately dry week, the tracers were recovered and fluorescine eluted from each with 5% KOH in ethanol. Only the Ffrwd Las tracer gave a positive result, and that a strong one. Some interference by peat staining was experienced, but this floated to the top of the ethanol, whereas the fluorescine came out just above the charcoal.

Thus one of the predicted lines of drainage was confirmed, crossing underneath the probably post-glacial course of the Twrch. The vertical distance is 800 ft, and the horizontal three miles.

GARETH H. JONES

REPORT ON THE RESCUE PRACTICE HELD IN PWLL DWFN

A report received before the practice was due, that the Pwll Dwn entrance was blocked, caused Pete Cardy, Colin Fairbairn and myself to take a Friday night walk in a snowstorm to unblock what proved to be a clear entrance! However this Friday trip had another objective: laddering the first four pitches so that the rescue party would find the pot much as a stricken party might leave it, but without a victim.

Once the practice got underway lessons were learnt thick and fast and several more general points arose which I shall list:

- (i) The rescue trailer is not well equipped with rigging accessories such as light weight snatch blocks, karabiners, and belays slings of wire and rope.
- (ii) The 4th pitch of the pot was too wet to be fair on our victim: a rawl bolt well out on the north wall might facilitate a dry lift.
- (iii) The stretcher used was the Modified Neil Robertson which proved to have several disadvantages despite its supposed usefulness on pitches. These problems were as follows:
 - (a) The patient tended to slide down in the stretcher because no crutch or underarm supports are provided and the 'cocoon' could not be tightened sufficiently to hold the patient by that means either.
 - (b) The stretcher is heavy in its own right.
 - (c) Loaded the stretcher would not pass through the slot at the top of the 3rd pitch.
- (iv) Mick Day provided a pair of cloggers which proved so useful that several pairs have been ordered for rescue.
- (v) The fact that personnel were not on the whole confident to self-lifeline slowed movement in the cave to a serious extent. Training sessions in the quarry might help here; anyone wanting to learn should contact Mick Day, Frank Salt, Bill Little or myself.
- (vi) Radio contact from the surface to the bottom of the 2nd pitch was possible with the underground aerial wrapped around the ladder.
- (vii) Pots in winter are bloody cold.
- (viii) Thermos flasks of stew empty their contents in the snow if inverted; lid or no lid!

Many thanks to Les and Jude for cooking and to Dan yr Ogof management for allowing vehicle access.

BOB HALL

REPORT ON RESCUE PRACTICE HELD IN THE LONG CRAWL DAN YR OGOF

Team: Pete Cardy, Alan Coase, Bob Hall, Eric Inson, Gary Jones, Barry Mawson, Jill Stevens (now Inson)

The object of this practice was to determine what type of immobilisation would permit a victim to pass through the crawl and also to clear a suspicion (fortunately unfounded) I had, that the Clarke stretcher would not pass through the crawl empty!

Having got the equipment to Shower Aven the team split up; Eric and Jill took a Thomas splint with Gary to Spectacles Chamber where it was fitted to Eric's leg. Eric then attempted to go towards Gerald Platten Hall with the assistance of Gary and Jill. He succeeded in reaching the end of the crawl but states that the twisting section between the s-bend and the flat out section was barely negotiable and he had to exert himself more than the average victim would be able to. Even allowing for the fact that the Thomas splint is some six inches longer than Eric's leg (which would normally be plastered) it seems that some leg injury victims could not pass the crawl unless some corners were removed.

Pete, Barry and myself meanwhile had no problems taking the Clarke stretcher to the end of the crawl in the empty folded state. Having had this much success we put Barry (being the lightest) in the stretcher without fitting the poles and tried to bring him out. Alan who had just arrived and myself pulled whilst Pete and Eric pushed. Barry helped himself having both arms out of the stretcher. We succeeded in getting him through the lowest part and up to the bends which proved absolutely impossible. Our observations were that: had I been in the stretcher even that much progress would have been impossible, the Clarke stretcher snags on the floor, a drag sheet with body splints would be better and a face guard to prevent grazed noses should be available to victims.

It remains obvious that for all but the least serious injuries the crawl as it stands will be a major if not impossible obstacle to rescue attempts. There would be several alternatives in the case of serious injury in Dan yr Ogof II and III:

- (i) Enlarging the crawl
 - (ii) Excavating a bypass
 - (iii) Sinking a shaft from the surface
 - (iv) Hospitalisation until patient is fit to travel without stretcher
- (i) Is entirely feasible
 - (ii) Perhaps more feasible
 - (iii) Is highly undesirable conservation wise and (i) and (ii) are much to be preferred except in exceptional circumstances after which we would be determined to fill in any surface shaft.
 - (iv) Is logistically difficult and is only applicable in certain injury cases. I would like information from medics etc. about the possibility of this.

All these answers could be used if it was necessary but what becomes of the patient whilst digging goes on? With this question in mind Pete Cardy, Nigel Ellis and myself spent three days at Christmas re-timbering a way into the chamber where Judson was trapped with a view to proving the feasibility of a bypass route. Some more work needs doing in this area with thin men and banger.

BOB HALL

20/12/72 Revised 20/6/73

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NO EVIDENCE OF CAVES - QUARRY COMPANY

Test borings at Penwyllt in the Swansea valley - in an area earmarked for limestone quarrying - has revealed no evidence of caves.

A quarrying company has applied for planning permission to quarry the land but fears have been raised that the operation could break into the Ogof Ffynon Ddu caves - the longest known cave system in Britain.

The general manager of the applicant company, Hobbs (Quarries), Mr. A.J.Mundy, said today: "We have spent an awful lot of money on test drilling but we found no evidence at all of caves under the land we want to quarry."

Hobbs (Quarries) already have extensive workings in the Penwyllt area employing almost 60 local men.

Mr. Mundy said if their application to extend the workings fails, one possible development would be that they would have to quarry deeper into the existing working.

"This would mean that we could continue our Penwyllt operation for a few more years. But if our extension application succeeds, it would safeguard jobs at the quarry".

Mr. Mundy added that if the company obtains permission to go ahead with its extension plans, Hobbs were prepared to carry out a landscaping scheme in the area.

"We have been in touch with the conservation authority and they have agreed to co-operate on tree-planting.

But before we begin such a scheme we must have some sort of future at Penwyllt".

From - SOUTH WALES EVENING POST
June 1st 1973

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