

# SOUTH WALES CAVING CLUB NEWSLETTER

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NUMBER 38.

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DECEMBER 1961.

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## 1. CLUB NEWS

### LLETHRHYD CWM

Members may have heard something of the proposal to quarry at Llethrhyd Cwm, Gower, which it was feared might cause extensive damage in Llethrhyd Cave due to blasting. Permission was refused by the Planning Authority but the operator appealed against this decision. An enquiry took place in Swansea on October 27th last at which the Club was well represented and the final decision now rests in the hands of the Minister of Housing and Local Government.

Llethrhyd Cwm is listed by the Nature Conservancy as a site of Special Scientific Interest, and so the Regional Officer was notified officially of the proposal and able to take steps to object. Many valuable caves however do not lie within such areas and the first evidence of quarrying may be the owner moving plant on to the site - which

is too late as he will probably have had planning permission by then.

It should be realised that unless the Nature Conservancy has an official interest in an area (e.g. as an S.S.S.I. or Nature Reserve) the Club's interests are not represented, and in fact the Club has no official say in the matter. However, provided that timely warning can be given it may be possible to approach the Planning Authority and ask for valuable features of interest to be protected, before their official "permission to develop" is issued.

Members are asked therefore to keep their eyes and ears open and notify the Secretary as soon as any rumour comes to them which may affect caving interests, so that all possible steps may be taken to protect them.

#### ARCHAEOLOGICAL NEWS.

The centre of activity in the middle of October was a weekend on my barrow (see earlier issue) when Pat Harris, Bill Little, and R. Roberts spent one day, and the Jones Bros. spent another in what they thought would be teaspoon and hairbrush stuff, but what turned out to be boulder shifting in the best boulder choke tradition. The barrow and the barrow boys and girl survived, and the excavation has made a great step forward: although few finds were made (a flint flake and pottery staining) the architecture of the monument is now clearer and the barrow seems to be of one period and not two as formerly thought - the main period of activity being the end of the Beaker period - circa 1600 - 1400 B.C. Another few weekends please? Write or phone Archaeological Anonymous at Radyr - an organisation worthy of support.

November 11th saw J. Harvey and the Gower Gang pushing yours truly into Tooth Cave - AND IT WAS WORTH IT. The chamber which had produced pottery was explored and for the first time this bloke had the pleasure of chipping pre-historic pottery free from Stal. with a hammer and chisel: Fantastic! After three hours we retrieved a large sherd from an Over-hanging Rim Urn - circa 1,000 B.C. An anatomist who has seen the bones pulled out by the Gower Gang say three people are represented by the bones - an Old Man, a Woman in the prime of life (no comment) and a Child of about 14 years. The Man is perhaps a 1,000 years older than the other two. Must I add that the Tooth Cave is a Six Star site and must be excavated. Volunteers will be needed - surveyors, diggers, and photographers (not too many of the latter). How about an inventory of the labour available? May I also make a plea for the cave to be out of bounds until we remove the bones from the stream chamber - there is ample evidence that pottery has been trodden under foot in this area.

D.P. Webley, 39 Heol Isaf, Glamorganshire.

#### NEW MEMBERS.

We welcome the following new members to the Club:-

Martin Gilbert, 34 Porth-y-Castell, Barry, Glamorganshire.  
John Dryden, 40 Sisson Road, Gloucester.

### O.F.D LEADERS.

The following members have been elected to the O.F.D. leaders list:-

G.T. Jefferson, Gwyn Thomas, Oliver Lloyd and David Jones.

### CONGRATULATIONS

To Mr. and Mrs. John Bevan and Mr. and Mrs. Bob Gregory on their recent marriages.

### CHANGES OF ADDRESS

Tudor Stark, 13 College Street, Sheffield 10, Yorkshire.  
John Bevan, 399 Hagley Road, Edgbaston, Birmingham 17.

### FOOD ATTRACTS MICE!

There has recently been an infestation of mice in the H.Q. which is undoubtedly a result of members leaving food unprotected in the kitchen racks. In order to combat this and assist in keeping the kitchen tidy members are asked

- a. not to leave food lying around the kitchen and dining rooms after they have finished eating.
- b. to make sure that any food which is left at the H.Q. during the week is stored in mouse proof boxes bearing the owner's name.

In the interests of hygiene, only non-perishable foodstuffs should be left.

### BOOK REVIEWS

#### Mountain Safety - The Central Council of Physical Recreation - 1961. Price 1/6d.

This is a pocket book about 5"x 6" and it contains a wealth of information and advice for those just going to the hills as well as those who still remain blissfully unaware of the precautions they should be taking when visiting some of our more remote caves. Primarily concerned with mountain walking rather than rock climbing, its 40 pages are adequately illustrated, with a touch of humour. Caving is not mentioned yet this is a book that able cavers should read, mark and learn to reduce the risk of becoming a fatal burden upon their colleagues or on the nameless strangers called to the too frequent and avoidable accident.

The mountain walking section contains some good advice on clothing and equipment but does not emphasise the desirability of choosing an anorak having a bright colour and contrasting with the mountain scene. Other sections advise about camping and load carrying, safety precautions in general, what to do if lost, emergency bivouacs, accident, illness and rescue. There is information on these and other matters, but only three pages on First Aid out of forty devoted to safety is not enough. The use of salt solution on burns is likely to introduce infection unless the solution is made with sterile water. If a burn casualty can be got to hospital quickly a plain dry dressing will be more widely approved than any other.

Sir John Hunt in his brief foreword concludes with "I hope that it will help you in the difficult task of joiningskill with courage and prudence with daring."

Obtainable from C.C.P.R. 6 Bedford Square, London, W.C.1.

W.H. Little.

The Gods of Prehistoric Man by Johannes Maringer.

The Gods of Prehistoric Man is part of a History of Religion published by Wiedenfeld and Nicholson (42/-) This book must surely represent the culmination of many years of intensive study and research. Professor Maringer carefully and clearly describes the religious practices of prehistoric times from the Early Palaeolithic to the Bronze Age - the fear of the dead, the rites, magic and fertility practices which have been revealed by the exploration and excavation of numerous caves and settlements all over Europe. The art of the cave painter and the connection of his work with hunting practices are vividly described.

One of the greatest difficulties facing Professor Maringer is the incomplete knowledge of Prehistoric Man and his beliefs. No doubt future discoveries will change present ideas or even cause new ones to be put forward. In spite of this difficulty the author has done his best to fill in the gaps in the light of present day knowledge.

Too often a book of this standard demands previous knowledge of the subject fully to appreciate it. The provision of cultural and chronological tables help to reduce this need of previous knowledge to a minimum.

As is to be expected with a book published by the firm of Wiedenfeld and Nicholson the presentation is excellent and the whole book is well illustrated with black and white plates and numerous line drawings.

D.W. Jenkins.

2. TOOTH CAVE - GOWER

At the beginning of November last year three members of the Club started a cave dig near Llethryd in the Gower, the actual site being about 300 yards down Green Cwm from Llethryd Swallet.

After three months useless work on the cave floor, we came to the conclusion that we were digging in the wrong place. Fifteen hours later we broke into the main chamber via a fairly thick calcite wall, in a different part of the original cave.

A short entrance passage led onto a balcony overlooking a beautifully

ornamented chamber, the walls are completely covered with calcite formations in a widely varying range. Unfortunately the original splendour of this cave has been spoilt by vandals. The chamber leads off to the east for about 30ft. and terminates in a small passage which is partially filled with limestone fragments.

This first part of the cave is now known to be a cave burial site, the date of which is thought to be Bronze Age. Excavation has commenced with Derek Weobley in command. Finds so far include three or possibly four human beings of a decidedly secondhand and deteriorated nature. Some of the bones were found on top of the fragments in the passage together with the pieces of a burial urn. The passage continues from the first chamber down and along for 60ft. to a boulder choke. This first part of the system is in all about 200ft. long.

The boulder choke was dismantled over a period of weeks and finally we entered a rifted passage containing several delightful mud baths and squeezes. This series of low and narrow passages finally led us to the main stream passage. The entrance series is joined along the whole of its length by passages which form a complicated network, the total length of which is a couple of thousand feet. This entrance passage leads into the main stream passage which runs in an approximate east-west direction. The dimensions of this passage vary from six feet at the west end to twenty feet at the eastern end, the length being about 3,000 ft. The last 2,000 ft. at the east end are only accessible however in abnormally dry conditions (i.e. the sump has dried once since February). In parts the passage is 30-40 feet high with formations at intervals along its length. The passage ends at the east end in a number of inaccessible sumps. There is also a sump at the west end which it is hoped the club will be able to dive. Half-way down the passage there is a large aven about 50ft. high and 60ft. long, the entrance to which is through a boulder choke which has now collapsed.

Work on the entrance series has continued but only a few hundred feet of rather muddy passage has been gained. Recently a banger trip with Charles George and Knidian was arranged and a hundred feet of oozy passage (now called Divers Delight) was gained. The entrance series of this cave sumps at irregular intervals depending on the weather, and the cow sheds at Willoxton Farm.

The main work at present is archaeological therefore the cave has been gated with the sanction of the Club. Because the entrance to the system is directly over the grave, members are asked not to attempt entry until the site has been excavated.

The whole system is a delightful brown in colour set off here and there with gay splashes of red and white. It is hoped many tourists with their cameras will visit the cave during the summer season. Wellingtons however are essential.

Roy Morgan.  
John Harvey.

### 3. AUGUST WEEK-END 1961

Many members will know of the shaft which is being dug on the hillside above Dan-yr-Ogof Farm. They also know, even if they do not share, the conviction of many of those digging that they will find their way into an extensive cave system through this dig. How the scheme originated is lost in the mists of time and the fumes of alcohol, but mad, impracticable ideas have a way of being made to work, especially it seems in the S.W.C.C. For some time, all that members knew about the scheme was that Bill Birch. was building a "cave detecting device". After consultations with Neil Jones and Eric Inson and contributions from several well-known electrical firms, Bill announced that the device was ready for testing. It looked as if it had been built from tobacco tins and the steering wheels of two ancient cars, but it gave some very satisfactory results when tested in Cwm Dwr and as a result was taken over to the other side of the valley for its first major use.

The story of how it located the point at which the aven comes closest to the surface is too long to include with this story of the actual dig. Suffice to say that it did locate the point and the dig started. In two days we were down about 10ft. in another two days we were down another six inches or so! After the surface rock had been removed a bed of hard, unbroken limestone was encountered. This bed proved undiggable by the methods usually used by members. The use of explosives on the surface of the rock resulted mainly in the shattering of the sides of the shaft. Various schemes were suggested to overcome this difficulty, some serious, some frivolous and some downright ridiculous. From the discussion two major ideas resulted. The first of these saw a welcome second visit by the S.A.S. to the Club early in July, bringing with them an even more welcome shaped charge. Although this visit provided those members present with considerable excitement and an interesting weekend, it proved that shaped charges were not the answer to this problem.

The second idea was to obtain, by fair means or foul a drill and a compressor to work it. Various enquiries were made which all seemed to indicate that it was going to be too expensive a project and gloom seemed likely to set in. Then Lionel Dingle who has been a member of the Club for a number of years came to the rescue. Dinx is an engineer and has access to drilling tackle. Through him it was arranged that the tackle should be taken to the Club for August Week-end.

The drilling equipment consisted of a tractor with a built-in compressor, high pressure hose and the drill itself. The tractor was driven up to the Swansea Valley by Dinx on the Friday evening so that Dinx can now be said to hold the Club record for the most unusual means of transport for any member. A route up to the dig had been pioneered and shown to be passable for a Land-Rover even though it had defeated the S.S.S. champs. Hopes of an early start on the Saturday ran high. In fact, listening to the conversation in the Common Room, one learnt that by August Monday, S.W.C.C. would be ladderding their deepest single ladder pitch. Alas for those hopes! Saturday morning dawned with typical Penwyllt weather. Dinx took one look at the persistent rain and gave his opinion that the tractor would not get up the hill, and as he was the driver his opinion was final. People pottered around the H.Q. and the Committee put forward their

meeting in the hopes that the weather would clear in time to get the tractor up the hill that day, knowing that all available man-power would be needed if the attempt was to be made. By mid-day the rain had stopped and a party set out to reconnoitre the route and clear any obstructions. By three o'clock every available pick, shovel, entrenching tool and bar was in use. Dinx had remarked that if thirty yards or so of the track could be levelled it might be possible to get the tractor up. That track was levelled! Then came the big moment as the tractor started up the hill. At the approach to the S.W.C.C. road-works it developed wheel-spin on the wet grass, but by this time there was an air of "We'll get it to the top or burst in the attempt". Brush wood was laid under the wheels, ropes were hitched to the front and every available person pulled as the tractor tried again. Well, it has been alleged that the front wheels left the ground as we responded to the Hon. Sec.'s command "Pull, you .....s" It may have been the pulling, it may have been the road works, it may have been the tractor itself, but most of us believe that it was will-power and swearing that got that tractor up the hill.

Drilling started early on the Sunday morning and by mid-day it was possible to load about one pound of Polar Ammon into 14 of the 15 shot-holes. The centre holes were drilled to a depth of 4ft 6ins, while those around the perimeter of the shaft were 5ft deep. Delay detonators (2milli-sec.) were put into the outer charges so that the rock would shatter towards the centre and leave the shaft walls (comparatively) safe. The charges were stemmed with packets of sand. It worked. It worked so well that it was obvious that it would take some hours to clear the shaft. The hero of the day was taken back to Penwyllt, not to rest on his laurels but to be fed and to get up strength to go back to the dig to recommence drilling! A number of the digging party shared this meal so that they could also go back to finish clearing the shaft. Now that that drill was up at the dig it was to be used to the full.

Back we went to the dig, taking with us not only Dinx but also reinforcements in the way of food and coffee, for it was obvious that the drilling was going to extend well into the night. The actual drilling started again late in the evening and by then the crowd of spectators had dwindled away until only the night-shift of diggers remained. Dinx was drilling away in the hole, almost invisible in the darkness and the dust. At intervals the drilling would stop and a report on progress came up out of the mark in the hole. At about eleven o'clock there was considerable excitement, someone was sending a morse message across the valley from Penwyllt using a cap-lamp as the signal lamp. Was there a Rescue on? Had some-one called out the Police? Was Robin Williams required urgently by one of his deserted patients? When we returned to Penwyllt some hours later having failed to make anything of the flickerings, we learnt that the message was really some rather rude comments being sent by Les Hawes and Brian Fenn! Between trying to decipher morse, drinking the now very welcome hot coffee, filling the miniature sandbags for stemming the charges and discussing what should happen to Bill Birch. and his friends if the hole was in the wrong place, the time went quickly and it was soon time for the next set of charges to be put in the holes. Just after midnight the second bang was set off. Banging is exciting at any time; on the top of the mountain in the complete dark and within sight of the hole it was even more so than usual. There was a sheet of flame, an explosion loud enough to have woken all the valley (or so it seemed to us)

and then an ominous whistling and plopping all around us! The explosion had thrown out more than we had expected and thrown it much further than previously, the noises were the bits returning to earth.

A few people remained at the dig to start clearing the shaft again but the majority of the party called it a day and returned to Penwyllt.

In the hopes that it would be possible to drill another set of shot-holes before the tractor had to be brought down from the hill-side, an early start was made on the Monday. I must here record an unprecedented event in the Club's history. The ladies were brought early morning tea by Bill Birch. and very welcome it was too. When I asked what had inspired this gesture, I was told that it seemed the best way of getting me up to do some cooking - a reply which put me back into place again very effectively!

The main party went up to the dig fairly early to finish clearing the shaft while the rest of us followed later, again taking food and coffee. Unfortunately for all our hopes, once the shaft was clear and Dinx had gone down (using the ladder which by now was necessary) he reported that the walls of the shaft looked rather shattered and not really safe to withstand the vibration of the drilling. Although everyone was disappointed that further progress was not possible immediately, it was agreed that the week-end's work had been most successful, thanks in no small measure to Dinx, and the party turned its attention to the problem of getting the tractor safely down to the road again.

The journey down was easier than had been expected and was accomplished with no mishaps beyond loss of dignity on the part of the Chairman, who on two occasions lost his footing and sat down suddenly in the mud, (I noted these particularly as on the second occasion he knocked me down as well!) Another feature of the operation was the amount of photographic equipment which was being flourished by members of the Club. Rapid calculations showed that if we could persuade members to expend the same amount on the shaft as on cameras, we could put a lift in!

As a result of all this activity the hole is now about 25ft deep and has walls which require some shuttering but nothing on the scale of that now notorious shaft into Cwm Dwr.

#### POSTSCRIPT TO AUGUST WEEK-END

As is recorded in the previous article, by the end of the Bank Holiday the shaft on the hill-side opposite Penwyllt was about 25ft. deep. It was decided by some of us that it would be a good idea to try to establish contact between a party in the shaft and a party in the aven to reassure those Doubting Thomases in the Club that the dig really is in the right place. It was also agreed that it would be a good thing to see if the aven showed any sign of our activities.



The week-end following the Bank Holiday, one party went into the cave at the dead of night, while another party set off up the hill-side. It is still a matter of debate which party had the more difficult job. It is a well-known fact amongst members of the Club that holes in the ground, even those as large as Pant Mawr Pot, can move a considerable distance between visits even when one is looking for them in day-light. Alan Stevens and I set off up the hill, secure in the knowledge that we knew just where that hole had been left. After a few mishaps such as getting me stuck halfway under a fence, owing to a strand of wire which was invisible until it had tightened round my middle, we reached the point where we had left the shaft. But, true to form, the wretched thing had wandered off and was a good twenty or thirty yards from where we thought it was (and that's a long way in the pitch dark and rain!) We took off the stones that cover the shaft and, using one of the legs of the tripod across the hole as a belay point, dropped the ladder down. It was decided that I should go down the hole first to sit at the bottom and tap on the rock at ten minute intervals in an attempt to make contact with the party in the aven. The first thing that I noticed as I climbed down was a strong smell of banger fumes remaining from the previous week's activities. I feel that this may serve as a warning to members who find themselves using explosives in a confined space that the fumes require a strong draught to clear them away. It was equally interesting to notice that the fumes started to clear up the shaft as the temperature in the bottom rose due to the heating supplied and the competition of the coffee that I had taken down in a flask. We were prepared for a long wait and our surprise can be imagined when, in response to my first series of taps, barely an hour after the other party had gone in, I heard loud and clear taps in response. We sat tapping through the rock to each other like a pair of demented woodpeckers for some time until Alan and I decided to call it a day and I started to climb out of the shaft again. The wood and nylon rope ladder gave us a few minutes amusement as I found that one had to climb up three rungs before the stretch in the nylon was taken up and one got clear of the floor. Apart from scaring the wits out of the party inside the aven by dropping first a large rock and then the bucket into the hole from the top, our trip back was easily accomplished.

The party who went into the aven was composed of Bill Birch., Eric Inson and John Dryden and they travelled like those mythical beasts 'The Clappers' to reach the Cascades in well under the hour. Within the hour Eric had climbed 20ft; that was as high up the aven as was feasible without engineering and without a life-line, and he heard the taps which I was making on the bottom of the shaft quite clearly. The most exciting discovery that they made was, however, the fact that the aven continued up and appeared climable providing that a little engineering was carried out so that the climber could be belayed.

Discussing the trip afterwards, it was agreed that the shaft is in the right place to within a very few feet and that the depth remaining to be dug is not too great.

As the problem of shuttering remains to be solved there was little activity until the second week-end in November. Then another trip to the aven was made by Bill and Eric, this time accompanied by Clive Jones, Neil Jones and Gwyn Saunders. Again Eric climbed the aven, but this time he took with him a hammer and a drill to put in a rawl-bolt. The first attempt made a hole in less than five minutes.

The remarkable speed was due to the unusual occurrence of a layer of calcite on top of moon-milk which in turn was on top of mud. A second attempt got the bolt securely into the rock and it was possible for Eric to climb into the next section of the aven. The aven went up another 15ft which he reported easily climbed (i.e. he didn't fall out of it!) so Bill and Clive also climbed up. They found that the roof of the aven is a flat bed of rock and that there is a small passage running off parallel with the aven but unfortunately too small to enter. After adding on the height to which they climbed, it would appear that the top of the aven is only about eight feet from the bottom of the shaft!

Who's for a dig?

Ann Williams.

#### 4. RORRINGTON LEAD MINE

Rorrington Lead Mine (ref: 304997 - Sheet 129) is at the bottom of the valley leading west off Stapeley Hill in Shropshire, and is reputed to be last worked about 100 years ago. The mine is essentially a level with branches of considerable length. It is still partially flooded.

Mud stalactites occur in the mine, perhaps 20 or so over 2" and there are 6 or 7 well formed stalagmites, together with many irregular masses.

Stalactites: There are about 20 well defined examples between 2" and 5". These are generally fairly hard (they can be tapped gently). They have smooth exteriors and are solid as far as can be ascertained. There is one example of a curtain 1" deep,  $\frac{1}{4}$ " wide and several feet long. Near the entrance they are mainly black, but deeper in they are pure orange.

Stalagmites: With one exception, they all grow from the sloping wall to a height of up to 5" above the parent mass. As observed by Malott and Schrock (British Caving), there is always a hole in the top. I observed that the size of hole is related to the texture of the mud. The smaller the hole the more solid the formation. The colour in several cases is a beautiful orange.

The shape of the formations does not, however, agree with Malott and Schrock's findings, as these have a resemblance to a fir cone. There are lobes covering the central formation completely, diminishing into wrinkles at the base. One stalagmite mass was making a regular sucking noise, and discounting the possibility that it was THE monster, we decided there must be a miniature syphon in action.

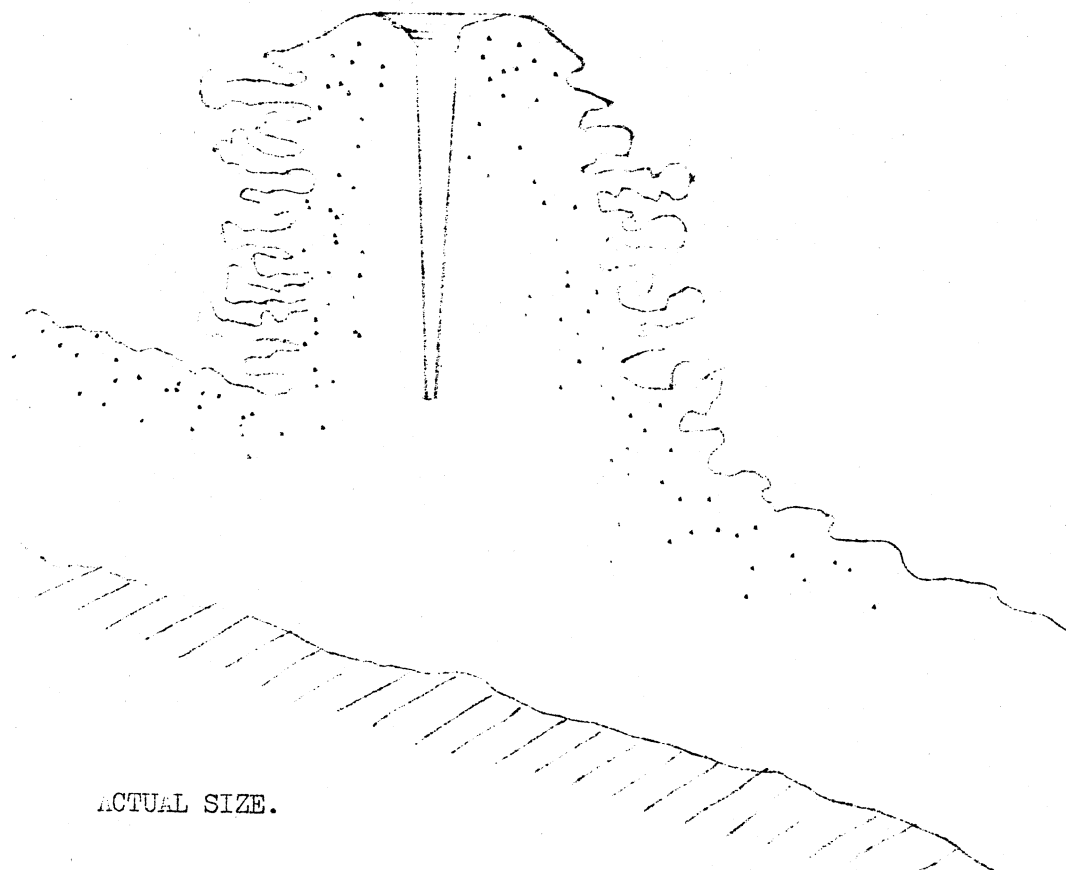
Deeper in the mine there is a left branch and almost immediately we

saw that the wall was covered with a white formation, which was smooth and shiny like the finest china. Embedded in it are bits of rosette, showing its rapid rate of growth. Vandals have already visited the mine and plundered these colourful formations (the manganese has tinted the white giving purples and black in the rimstone pools. Later analysis of the formation shows it to be composed of almost pure zinc carbonate ( $\text{ZnCO}_3$ ) with no detectable calcite. We also found a few examples of cave pearl here.

More important perhaps, was the discovery, still deeper in the mine, of a mud stalagmite with three pools cut in the level top. Two of these were seen to contain clusters of black cave pearls, about 20 in number, but quite small (max.  $\frac{1}{8}$ " ) The composition of these is unknown as yet. Here also were traces of mud flowers, but they were poorly defined and need positive identification.

Unfortunately the mine is poorly ventilated and hardly anywhere was the air good enough to prevent the acetylene flame smoking. Smoke tests showed that there was almost no air change in the side tunnels and this prevented a complete exploration being made. A notice giving warning of the gas was fixed in the cave.

J.V. Osborne.



ACTUAL SIZE.

## 5. THE USE OF MAGNESIUM RIBBON IN CAVE PHOTOGRAPHY

Underground photography can be very much more expensive than photography in daylight, as one has to supply the necessary lighting, and the cost of a colour transparency can be doubled by the use of flashbulbs. Any ways of producing cheaper illumination are therefore worth considering.

Flashpowder is very low in colour temperature, and although this can be allowed for, smoke is a great problem, (not to mention the factor of personal hazard!) Magnesium ribbon has a much higher colour temperature, and the smoke produced is not objectionable unless the space is very limited.

I experimented with Ferraniacolor, and after several pictures of black cats in coal cellars, I produced some very satisfactory transparencies. Using daylight type film and an ultra-violet filter, the colours produced are almost identical with those produced by blue flashbulbs.

Magnesium ribbon is very suitable for photographing formations, as the shadows produced are soft and the light can easily be split up to come from several positions, according to the contrast required. It cannot entirely replace flashbulbs however, unless you are lucky enough to have a model that will 'freeze' for up to five minutes; but it is useful for 'filling in' if a flash is used to illuminate the point of interest in an action shot.

Determining the length of ribbon to be used was at first a problem, but I reasoned that the table given for flashpowder in the photography section of 'British Caving' would give me a relative guide if I could find the conversion factor. Experiments showed that the factor is 'one foot of magnesium ribbon = ten grains of flashpowder', so that the table can be used directly, reading, for example,  $2\frac{1}{2}$  ft. of ribbon for 25 grains of powder.

A technique that I use quite often for action shots is to get the model to fire a flash bulb away from the camera, and to calculate and burn sufficient length of ribbon to illuminate the foreground from the camera position to the model. The possible arrangements are, of course, infinite in number, and this gives the underground photographer a great advantage over his surface friend and for me makes this hobby very much more interesting.

Eric Inson.

## 6. MENDIP NATURE RESEARCH COMMITTEE. SOUTH WALES 1961.

(Our thanks are due to the Mendip Nature Research Committee and to Julian Fortnam and Ray Mansfield by whose kind permission this article is reproduced.)

A small party of M.N.R.C. members spent a week at Berthlwyd near

Ystradfellite to look for new caves. After noticing the amount of water sinking in the bed of the Afon Nedd it was decided to record as many sinks as possible. We were unable to survey after sink 9 (see attached sheet) as it was taking all the water. We did however manage to survey 300 yards of the river which included 9 sinks.

Whilst carrying out this we decided to search the banks of the river and were repaid by finding Badger Cave and a small cave nearby. At the end of this cave running water was heard - probably the stream in the end passage of Bridge Cave. A grade 2 survey of Badger Cave was made and we were most pleased when this was finished as there were signs of recent occupation by the badger.

The two new caves found were on the land of Jim Llewellyn of Berthlwyd Farm. To him and his wife we owe our thanks for generous hospitality and for telling us of a hole on his land where he had thrown a lot of dead sheep. The hole which he had described to us was located and a cave was found to exist under the rubbish which had been thrown in.

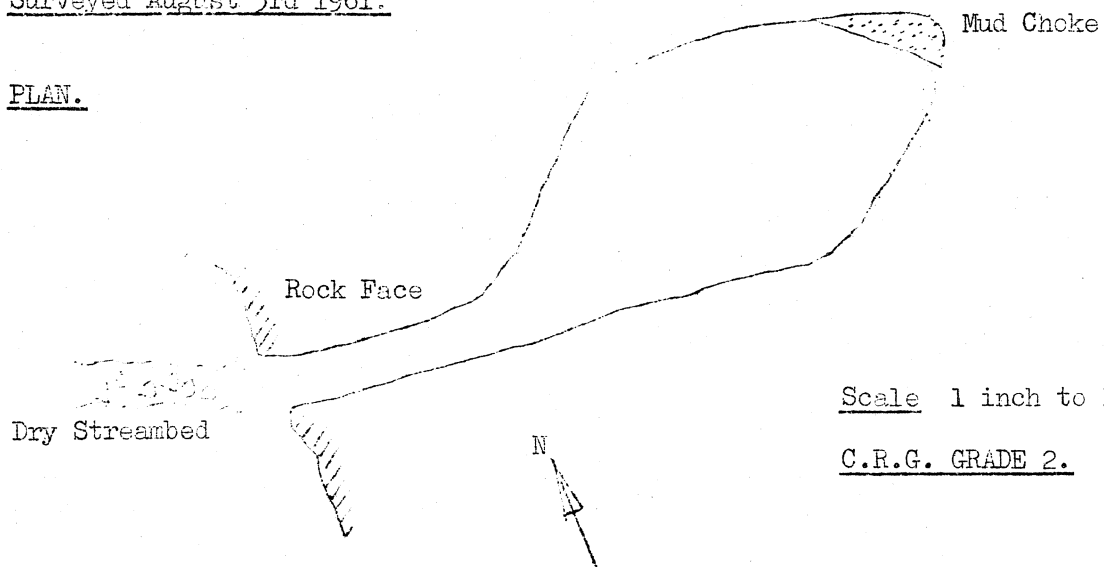
The cave had two passages, one being a rift and the other a series of small pots. Both passages showed vertical scalloping from ceiling to floor. Naturally we called this Dead Sheep Cave, but it was then translated into Welsh to Ogof-y-Defyd Marw.

Nearby was a large depression 50 feet deep and approx. 200 feet across and having a dry streambed running into it. At the bottom was a small rock exposure containing a very tight cave entrance partly filled with pebbles and decayed matter. The cave was about 40 feet long, between 1 foot and 3 feet high and the width varying from 18 inches to 12 feet. The cave ended in a sticky grey mud choke which looked quite diggable. Grade 2 surveys were made of both caves.

Julian Fortnam  
Ray Mansfield.

CAVE IN LARGE DEPRESSION NEAR OGOF-Y- DEFYD MARW  
Surveyed August 3rd 1961.

PLAN.

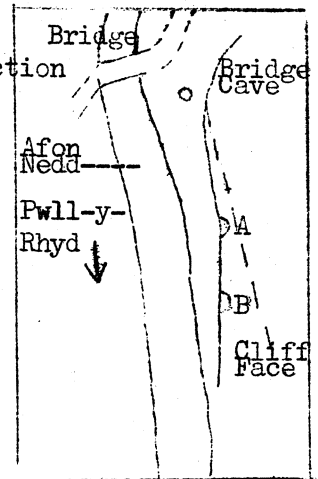


BADGER CAVE N/S/R 912139 3rd. August 1961

PLAN

A. Possible Connection  
with Bridge  
Cave.

B. Badger Cave.



Entrance

Height 2-3 feet

Small Boulders

Scale: 0

5

10

15

20

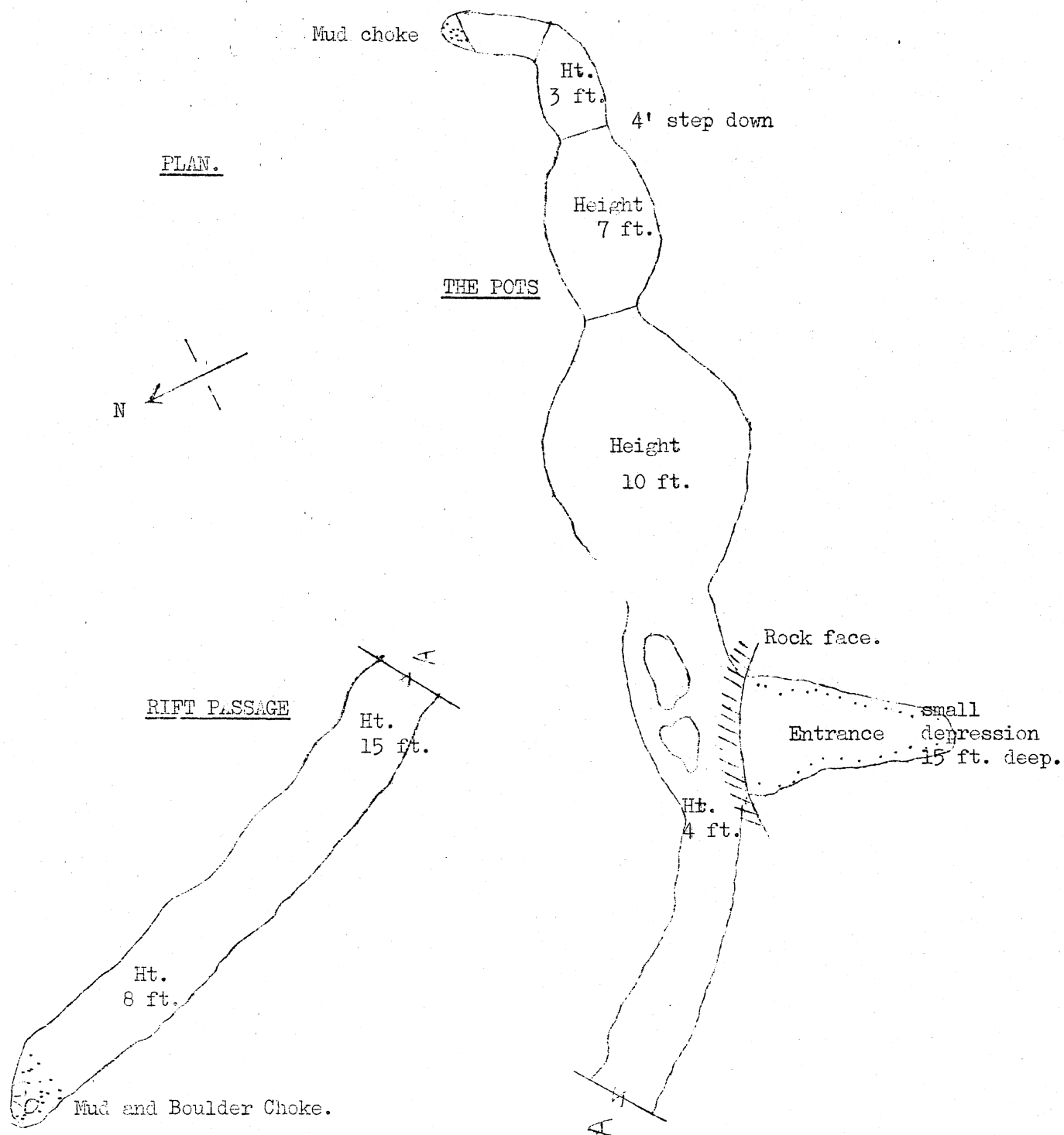
feet

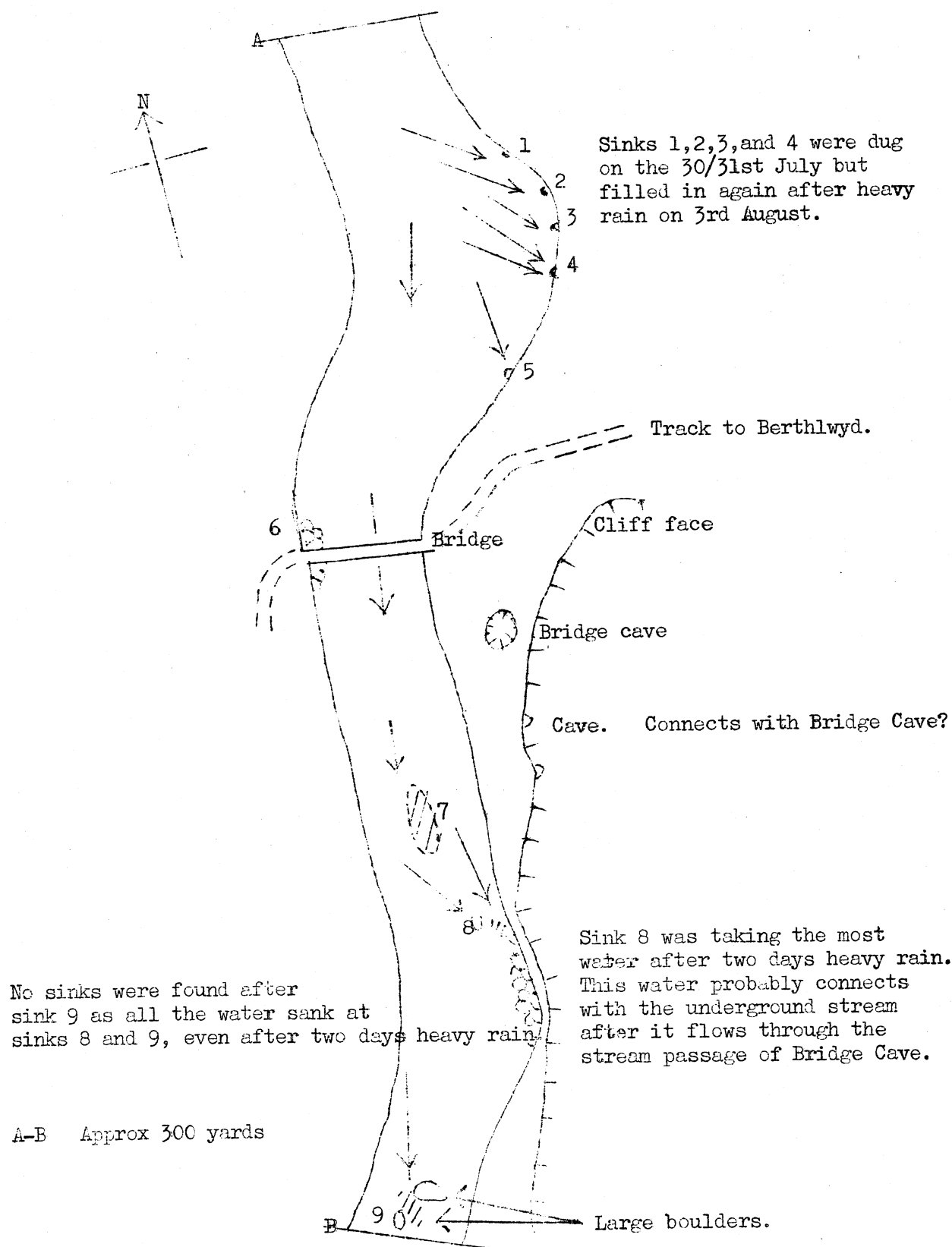
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GRADE 2.

Mud Choke

OGOF-Y - DEFYD MARW N/G/R 9151-8 (BRECON SHEET)  
Found 29th July Surveyed 3rd August 1961





SURVEY OF SINKS IN THE AFON NEDD  
31st JULY 1961.

J. FORTNUM R.MANSFIELD



## 7. SOUTH WALES EXPEDITION TO JUGOSLAVIA 1961

### INTRODUCTION

Most club members have read the wealth of caving books written by our continental counterparts, and have no doubt, at sometime or other, wished themselves in a position to visit or explore some of these magnificent caves, instead of just reading about them.

Some of us visited Yugoslavia this year where we explored two new pot-holes and had a look at a number of extensive cave systems. We were not by any means the first party from this club to go caving abroad, but we were the first to make a large quantity of equipment for this purpose. Most of this equipment has since been purchased by the club, and is now available for use by anyone wanting to organise a similar venture in the future. With equipment borrowed from the club and contacts which can be made with foreign clubs, club members are in a position to organise worth while caving holidays in other countries. Such holidays are not all that expensive, it cost us about £50 each for 3 weeks abroad.

Judging by the number of people who wanted to come to Yugoslavia there is a great deal of enthusiasm within the club for such projects. All that is wanted is for these people to get together, decide where they intend going and get cracking.

When we planned our Jugland trip we had a considerable amount of help from people who weren't coming with us. Bill Clarke kept our noses to the grindstone, Les Hawes looked after the cash side, Allan Stevens, Colin Baglin and Johnny Hiron made swages for us, Laurie Galpin and David Hunt helped with numerous odd jobs on ladder assembling and Rob Williams worked out the number of Pills and Powders we required. Thanks to Lewis Railton we got our two guides, Ivan Gams and Zlatko Pepionik, without whose help we wouldn't have seen as much as we did, or walked so far as we did.

Anyone else planning a caving visit abroad, providing he or she is enthusiastic, can rely on club members for help and advice.

Clive Jones.

### SIC(K) TRANSIT IN GLORIOUS POTLAND.

It all began in Bled. Before that it was leisure; a puffing archaeologist, thinking that pots were things prehistoric people kept in their bedchambers, travelled from Le Touquet with the Harveys. Leisure..... Except of course for a flat tyre on the autobahn of autobahns when Clissold, grappling with a wheel brace on its edge, twice had his bottom wiped by fiery

snarling Mercedes Benzs. Char on the autobahn, tea and stale bread and summer. Leisure.....rolling along the autobahn in a Vauxhall with three normal wheels and a Bedford spare - all experience. Leisure.....except of course for that camp at Strasbourg, when the antiquarian, last having camped in 1937 with Boy Scouts (or was it Cubs), found the French Railways strange bedfellows. It was unusual to find a tent site which nearly entailed using sleepers to sink pegs into; each time the points changed, the angle of the tent pole twitched into a new, alarming position. Each hour a dazed dazzle of light and noise flashed through the tent of his dreams, his head clicked with the points, punctured and punctuated with train whistles within and under his pillow. 'Troop movements', he thought, 'It's started'. Only a stiff neck and a cold concertina in the morning air and a shower of slops on the canvas reminded him he lived - with garlic smelling neighbours.

It was easy and living; rolling into Bled at noon; the boys eating under the plane trees with that man of steel - Ivan Gams and his softer, rounder zoological friend; peace.....no violence, no struggles in caves, sipping wine, white and red under trees; talking, perhaps interjecting a German word or two - real class. Even a mistranslation of a menu at Heiligenblut a few days earlier had brought its reward and compensation of two main dishes - trout and chips followed by beefsteak and chips - and a look of wonder from the waitress. All leisure.....never mind the brakes failing on the Gross Glockner, the tents put up in a hurrying wetting rain at dusk; never mind - we saw the mountain in the morning, all snow and white, crystal against blue..... This was living!

And so to Bled - swimming in the warm bed of water, washing away the sands of many hours travel. Talking to Gams under the lakeside trees, "Where are the prehistoric sites, dear sir?" "Oh" he said, "you must find time to visit the museum in the castle". Oh soon the disillusionment. "Now" he said, "we will go for a four hour walk to the mountain hut, where the pit is". Surely, I thought, this is a mistranslation; how can one start at half past five to walk 7 miles (and UP too) with pack and ladder - the chap can't understand the lingo - but HE DID. "It's up hill all the way", he said; IT WAS! November 5th will be remembered by some for political reasons, by the more intelligent of us as the date of the first caving trip in London when Banger was used - August 24th will be forever celebrated as South Wales Sherpa Day, and paper edelweiss will be peddled from valley to valley and a hushed whisper and retreat will greet the pile of sweaty clobber piled in the Club's Museum. The fellow spoke good English - too good - his underestimate was in the best anglo-saxon fashion. In half an hour, the puffing archaeologist, clothed in sweater and anorack (it might be cold in the hills) was a steamy, wet sherpa. After the first hour, when the perspiration was flowing freely through vest, shirt, pullover and anorack (Oh where was the cold mountain air?), we still felt that the hut was around the corner - but it wasn't. At first, through pinewoods pock marked with swallets, the gradient stiffened with our knees and up and up we sweated and swore. "This is where the treeline ends" said Gams leisurely waiting for the thin string of people, who like elastic stretched further and further down the hill. "Look, up there - chamoix - you are very lucky, only a few times have I seen chamoix so close", said Gams. Our stout hearts were made of unseasoned wood - we didn't appreciate the good fortune. It was dusk (Oh where was the cold mountain air?) and still the path pulled and sweated up into the darkness, into a white desert

of limestone. Let's try a joke, I thought. Let's bring all the Lord Limestones' of South Wales here by coach and show them this white paradise and shout - "Look boys - No Overburden!" It was no joke. If Gams had said lets crawl into a cave and end it all, it would have been easier than following his light footed figure up and up into the black and white night. "A light", we said. "No", said Gams, we've come up half way when we reach the cross, where the chamoix are, and after that its down hill all the way. It was, relatively speaking, if you can call a crumbling, stone ridden, track, sometimes horribly exposed for this poor mortal, sometimes up and down through shrubs and the scuttling of goats, easy; but after the cross (a signpost for our disillusionment) it changed. It was dark, the air and sky were dark, the world went negative, the world was white, the massive Triglav white as white, shining against the dark, shining even against the weakling stars. The world was breathtaking, had turned around, was music, music even for the aching bone, and we all reached the hut. I shall not dwell on the sock wringing, the fighting off of the goats from socks, rope and ladder, or our new found Birchenough Brew called Char, or the bread eating ceremony.

After the pot, which was not archaeological, and the shudder as the rock hit the ladder, we followed light footed Gams down the mountain - in two hours - ten days later.

"What next", said the archaeologist? But it was living again - Postojna, hotels, eggs for breakfast, second helpings, the night young (except for squitter sufferers). Electric trains in caves, big places - sending funny cards to absent friends, 'S.W.C.C. training in caves' - an overlooked pun. It was all birds and monsters - "see that Stal. there, like an elf" - it was tempting to pose in the dark and as the light poured on, to make a defiant rude gesture. We came out the wrong end - on foot.

The morning had been prize day for the archaeologist at the Institute of Caving. He got rather livid with the curator on whether an object was bone or stone; made a big thing of it to justify himself.

What next do I remember but Skocjan the wonderful, breath-taking - the right amount of protected exposure on Hank's Bridge to cause the heart to pant, the horror of the old tourist's track, high like fly paper on the ceiling. By this time Gams had left us and it was with fear and trembling that we shook hands with Pepi, a small elfish bundle of sinew and nerve - at least he couldn't do a Triglav on us, I thought. He charmed us, adopted Gordon as father confessor and made our economic food buying chores, pleasant and easy. Hurrah for Pepi, no semi-linguistic feats for the archaeologist. In the afternoon we went to Predjama, another must for the archaeologist - one of the few caves that have been excavated recently. Once through the massive gates the scuttling anti-quarian made for the Neolithic room and nearly lost it - saved by a pidgin German conversation with an Englishman!

From Postojna to the coast was another nightmare of travel - seeking an elusive campsite which unexpectedly turned up about sixty miles after where it was supposed to be - exciting - the right amount of petrol shortage to make the trip sporting. There was a wind there by the sea, a wicked dry and warm

wind which made our day because of the camping antics of three English frauleins in large skirts who had supper on a collapsible table which lived up to its name, and a primus which uncontrolled shot skywards, starwards, flames and fuel - S.W.C.C. to the rescue. The rest of us sniggering in the dark. Amateurs! The wind under and over the table, under and over the tents (this one slept in the car), it was a bad wind, but it had gone by the morning when the sun got up and Birchenough, snorkel and sea slugs, went for his morning bath. The day before had also been a triumph for snorkels, clear sea, deep sea with fishes and world war two rusted vessels - a challenge to the adventurous.

The sea behind us, we went dusting our way over the hills to the second pot. Hard white stone roads, giving no release to tired wheels. White dust everywhere, like pollen, flour; blowing settling in cars, in hair, in food. Nowhere was private for this dust lined the wind. The journey (leisure all the way) ended at Gracac where the second pot and village waited our pleasure. This was living. The policemen, feet on table took our passports and we went to the pot to be greeted by the villagers as the tents were unpacked. Real expedition stuff - and talking with the villagers we got our morning and afternoon milk. To me at this time, for the first time, came an atmosphere of the unknown, of deep darkness. The pit, like ourselves, was an unknown thing to the people, a wild uncontrollable demanding problem of bottomless space: like the pit we were the common denominator of their problems, were semi-literate answers. We were accepted as the pit was accepted, a not quite understood intrusion.

The second pit was third in importance to the antiquarian, to (1) a Mother Bear and two baby bears, and (2) Snakes. It was difficult for a puffing (not too bad by this time) archaeologist to appreciate the speleological meaning of the word to the full, when there was a danger that by morning he might have been turned into Goldilocks and manflesh. "Who has been eating my porridge? Two at least claim heavy padding sounds at night around the tents - or were they cows? No one is missing. The snakes were mid-day beasts to wriggle into tents at noon, retreating from the sun. Was it only good scout training which made some of us air even the ground sheets? - or pile stones wallwise around the tents? The pot was I believe a disappointment; no snakes came to the tents, only one in the depths of the jama came to the hands of Pepi and Birch. - 400 ft from the hot sun, quite a walk for such short legs.

After the next day, surprise and prize day for the thin, angular archaeologist (mouth watering pottery - Bronze Age - in a cave) it was for home via the sea, the land and the sky. The lesson was well learnt - no museum could ever teach the axiom of prehistoric survival which became ingrained in us; and anyway they were all cissys those Neanderthaloids, they never climbed Triglav - not even in bearskins to keep off the chill mountain air.

Derek Webley.

## TRIGLAV AND POSTOJNA AREAS

As the plane touched down on the tarmac at Le Touquet we felt we were well on our way. The planning and efforts of two years were beginning to bear fruit. Our vehicles were laden with kit and food, The forgotten items were now hundreds of miles behind us and in holiday mood we stopped caring. During the next few days most of us would be meeting in the evenings at camp-sites spreading across a large slice of Europe. The previous night we had been dotted about the South of England; now on the sand dunes of Le Touquet were a Landrover, a Hillman, a Bedford brake and a motor cycle and if that was not enough to mark us as British, then our drab little tents must have done.

On Sunday morning after an early breakfast a brief conference called by Clive Jones, the expedition leader, decided upon the days "march": across France!..... At 10 p.m. the Bedford pulled into the campsite at Strasbourg, 405 miles from Le Touquet, the Rover and Hillman were already there. In the morning Harveys Vauxhall had joined us, also Bill Harris still "running in" a new motorcycle engine.

We were glad to get started again next morning. The camp site was overcrowded; we were pitched in the only space left (near the dustbins). The lavatories too put me off going to that city again. Strasbourg deserves something better: a city of that size should do better if it wants tourists.

On the Rhine Bridge we showed our passports as we left France and entered Germany. We headed N.W. until we joined the Autobahns by-passing Stuttgart and on towards Munich. We were surprised to catch up the Vauxhall and found they had tyre troubles, one puncture and a faulty remould on the spare. Fortunately, their wheels were the same as the Bedford's so we lent them our spare and agreed to drive together to Austria, where they would get a tyre at a more favourable rate of exchange. The scenery through the Black Forest was lovely after the flatter areas of France. While we stopped to brew up tea the Rover arrived so we made a picnic meal of it. By 6 p.m. we were in Austria heading for our evening rendezvous at the top of the Thurn pass: a lovely campsite in an alpine meadow opposite the Inn at the head of the pass.

### Next Morning - Tuesday.

We were well ahead of schedule and had fine weather. A ski lift took us up the mountain side, and a short walk brought us to the top of Resterhohe. Before us was the glittering spectacle of the Eastern Alps, every snowfield shining in the morning sun. In the distance clouds were creeping over the cols to join the puffs in the Inn Valley far below us. Early in the afternoon we were all on our way again. By the time we reached Bruck a thunderstorm had struck. For an hour the heavy rain almost blotted out the other side of the street. We shopped and dined before starting up the Gross Glockner Pass. We hoped to camp high above the glaciers, but bottom gears just ground onwards and upwards round the hairpin bends, ears popping, up into the clouds. The sign posts tallied with the maps, the only indication of our position.

Slush showed that new snow had been falling during the recent storm. Grey-white patches at either side showed the permanent snow-line. Wind and rain seemed to be in command; it was no beauty spot that evening. We detoured over to the Franz Joseph Glacier and gazed down upon its moraine strewn surface in the fading light of a wet evening, just like a British winter. We drove down the Southern side of the pass to Heiligenblut, a picturesque village, and to an excellent campsite near the river. We cooked our evening meal in the rain; Bill Birchenough slung away our beans insted of draining them (they were scraped up and lost no flavour), while Gordon Clissold did the same with his peas. Soon the wine in the camp site cafe jollied away any damp spirits.

We started late on Wednesday morning stopping to "bank" and shop. At Villach we all met again and were joined by another motorcycle - Seaton Phillips, who had gone via Switzerland to pick up Marion. After looking at the town and its beauties we lunched under the shade of a vine in the court yard of an Inn. The weather was improving, getting distinctly hot by midday.

We picked up two hitch hikers from Liverpool who squeezed in amongst our ~~happ~~ baggage in the Bedford and proved to be a test for the time when the Rover would leave the expedition and we should be carrying its present passengers and kit. The Wurzen pass is not as high as the previous one but has only a gravel surface. In one part the slope is 26 percent (over 1 in 4). We just made it.

At the top of the pass, close to the Yugoslav frontier post, was a good camping place at the roadside. The hitch-hikers joined us in camp and were glad of the fresh water we had made a habit of carrying in every car. An inn beside the frontier post produced not only hospitality and witty repartee from a landlord with connections in Port Talbot, but also a tame red deer. More distracting however was "Continental Tummy" now affecting a number of us. The Yugoslav customs seemed mainly to be tedious form filling, but after that we were on our way with all morning to cover the last few miles to Bled. Great walls and towere of limestone are spectacular even though half shrouded with cloud. We peered up the stoney looking gullies to where the map marked Triglav - at 9,400 ft. this is the Queen of the Julian Alps. We left the veiled beauty and on Thursday at noon we made our rendezvous at Bled where we met our old friend Ivan Gams and a new friend Dr. Tarman.

By mid afternoon we were driving through the forests on the Southern slope of the Julian Alps. The weather was now clear and sunny and we were refreshed after swimming in the lovely warm lake at Bled. We parked our vehicles at a Forester's house beside a barracks and sorted out the kit to take with us for the next three days. In the evening a long straggling line of tired British trudged onwards and upwards to Vodnikova Dom, a mountain hut. We took caving clothing and tackle with some 600 ft of ladder, sleeping bags and cooking gear. Our packs were pretty heavy - far too heavy. On and on went the path, up through the woods, above the tree line, and still on and up. The glowing sunset w.s brief, but there was Ivan, another thousand feet above us. Now and again someone would sing a few lines but give up breathless. Packs and boots got heavier, a brilliant moon made the surrounding mountains shine so white they seemed to dazzle. Each step became an effort - followed

by another effort to straighten the leg for the next - "Press on, there's nowhere else to go". A swear for those setting the pace, slow, but not half slow enough. Another swear at those lagging even further behind. 'Oh' why the hell do we do this for fun? We're just not in alpine training. 'Oh' that weight on my back, I don't care if I fall over the edge - I hope I do - no I don't. Better try and encourage those behind. "We are over the worst: get a move on, have another rucksack if you can't keep your feet on the ground" "It's downhill when you get to the top", but we were too tired to reason that out. Then it was downhill, but muscles just ached in different places and packs jolted and rubbed in more places, it was just as bad! or was it? We weren't so breathless and we could grumble better. "On your feet you, not stopping here all night to freeze to B..... death, pick up his sack".

The path turned into moon shadow; then a light glimmered across the next scree slope. A mountain hut silhouetted itself against the sky, hands came and lifted my pack, "dump it in a heap this end of the room" someone said, "there's some tea coming". Just about exhausted, we had made it, and made shorter work too of the (herbal) tea. Felt better after some hot greasy soup but then shivering cold I went to bed without drinking my beer; the others told me next morning that even Harvey had refused food that night (the position of Hon. Dustbin Guts has now been given to Bill Birch.).

Rupa V Toscu (1930 M. approx. 6330 ft.) Friday August 25th.

With us, to show their recent discovery of this pot on the mountain 'Toscu', was a shepherd and his wife. A short traverse (back over part of last night's path) until we overlooked Velopolje and with less than one hour's climbing we stood in a slight trench over a fault or major joint line. Mist and cloud hid us from the surrounding peaks. There were sporadic patches of mountain fir some 3 ft. high and on the almost bare patches of limestone grew edelweiss in profusion. Here was the first 'pot' we had come to explore. A large stone was dropped and 15 pairs of ears listened intently as it banged and crashed against the walls far below, then to boom and thunder more from further depths. A number of snake like fir branches were tied together to make a secure tether for the ladder and a rock belay secured Neil for 'working' the lifeline. Clive offered the first descent to Gams, but he insisted that as 'guests' the honour should be ours. I pretended I wasn't 'champing at the bit', but some moments later I was on my way down the ladder which curved out of sight some 50 ft. below. At 80 ft. there was a scree covered ledge; space here to work the next pitch which carried on downwards with increasing width. A natural belay in the corner was brought into use and some loose stones were kicked down to prevent them being pulled loose 'working' the lifeline down the next pitch.

Bill Birchenough was next down to here with more ladder and a bag with pitons (pegs) and a hammer. The belay in the corner was not in the best place as the ladder would have hung in the narrowest part, also where small stones dislodged by our feet were falling. A peg, driven home in a better place; but still the ladder lay over loose stones in spite of our gardening, so we joined the new ladders on to the end of the ones we had descended and used the peg to belay the second lifeline. I went down the next pitch which soon became vertical. At 150 ft. down I could not see the bottom. The pot widened and broadened during this pitch, and a small ledge 9 inches deep made

a convenient resting place. Small stones whizzed down from above smashing against the walls, and I expected one on the helmet any moment but was surprised when a small one hit my stomach. I descended another fifty feet, but after the gruelling portage of the day before a 200 ft climb on light weight tackle was enough for me. I came back up to the 9 " ledge for a short rest, climbed up to join Birchenough at the 80 ft. ledge. Phillips came down the first pitch and I went up to the surface to describe the situation, to Clive Jones whilst my place was taken by Gams.

Birchenough went down to about 280 ft, but there was still no sign of the bottom or a ledge wide enough to break the pitch. Life lines had been knotted together for this descent, but it was a surprised Birchenough who, wanting to climb up again, saw the life line snaking down past him. Fortunately Phillips was not tied to the falling end. The knot came untied in the slippery new nylon ropes - tut!tut! More lifeline was tied on (with check knots) to bring up Birchenough who's place was then taken by Gams.

Gams is as much a demon on ladders as he is on a mountain; he went down 380 ft. Shouting down this far from the first ledge had become impracticable due to the echoing of the voice in this otherwise dry and silent shaft. Whistle blasts only were intelligible.

Up on the surface, soup and coffee had been brewed; it was after midday, the biologists with Dr. Tarman had been catching shiny black salamanders that scampered amongst the alpine flowers around the entrance. A noise of crashing and rumbling far louder than our initial test came from below. The ladder jerked, something had 'had' it - "O.K. Bill?" "O.K. Seaton?" More stones crashed somewhere below - "We're O.K. Gams is below, send down more help! More rope too". I wasn't the freshest but I was the nearest and that noise was pretty stimulating.

"Is the ladder O.K.?"

"Yes"

"On my way".

Down on the first ledge Phillips was holding a large block at the edge of the 2nd. pitch with Birchenough tying a rope around it. Gams yelled something from far below which we could'nt understand, but at least he was still alive. He whistled for the line to be pulled up but we were all intent on belaying that block. With every movement we made, a shower of small stones went over the edge to crash about Gams. The block was eventually tied back and two of us worked the lifeline. Gams climbed slowly but steadily up a pitch deeper than Gaping Ghyll main shaft. We kept a tight rope, Phillips the anchor man belayed from the peg was nearest to the edge and applied most of the tension. Next to him I drew the line from him keeping it away from the loose stones whilst Birchenough, to one side paid the growing heap of rope onto a safer part of the floor. Gams arrived, carefully passed the poised block and joined us on the rotten ledge, unhurt and grinning. He had seen the bottom another 45 ft below him, but there was no way on. It would have been risky to deladder the pitch from beneath the poised block, so untying it we let it thunder to the bottom. Better that it should "bash" the ladder



than one of us. A descent of only a few feet enabled us to pull the ladder clear of obstructions and relay it to the others on the surface. The damage? - only one crushed rung. Soon the last of us surfaced, and once more with loads on our backs we tottered down the scree slopes to the hut and another welcome brew of 'chi'.

#### Triglav (Saturday August 26th)

With no more than our pockets full and with anaraks tied around our waists, we set off once again behind Gams. Uphill of course, but without the loads of the previous days our feet hardly seemed to touch the ground. Some 2/3 hours later we were puffing and blowing again as we reached a hut on the col. Cups of 'chi' went 'down the hatch' again as we gazed upon the limestone all around us. Sheer walls a thousand foot high and miles long, dazzling white scree slopes nestling up to massive buttresses. Beyond the col a snow-field descended to become a glacier (the only one in Yugoslavia). The morning sun was hot and the white limestone as dazzling as the ice. The ridge to Triglav's peaks (Triglav = three peaks) rose sharply and steeply from the col. As the exposure increased so the iron spikes and carved footholes of this "Tourist" route were more numerous. I decided I was a tourist and used them; the alternative would require ropes. The fresh wind on the summit curtailed our sun-bathing but not before we had all exclaimed that we had never seen so much limestone - as far as the eye could see it was all limestone.

We went down again to the col where we ate at the Hut then with a length of ladder and a rope we kicked our way across the snow field and down the little glacier to a strand of virgin rock bisecting it. Gams and Urash (his friend) climbed down the bergschrund soon to be followed by us into a dark chamber. After the bright sun on the ice we could see nothing in the gloom for some minutes. The steep ice floor would not yield to kicking footholds but nature had provided just enough. Across the chamber Gams and Urash crawled into a passage, unfortunately there was too much ice and Triglav Ice cave was still closed for another year. (A lucky Westminster crowd 3 years before had found it open.)

#### Mirror Cave.

Almost beneath the Hut on the col and at the top of the Southern scree slope was another ice cave, though not having a glacier flowing into it. A small frozen lake inside a large chamber maintained its ice throughout the summer. We shuffled across the slippery wet surface of the ice into the darkness of the chamber beyond. The name of the cave was then apparent when we saw the entrance and first chamber mirrored at our feet. We explored a ledge opposite the entrance; above was a steeply inclined tube passage. Urash knocked in a peg for a running belay as he climbed up to the passage. Alas! nothing there.

We descended again to our base at Vodnikova Dom and packed up our sacks and frames ready to go back to the cars in the morning but not before we had found an intriguing natural pit quite close to the path, again 20 ft.

down it was blocked with "eternal" ice. The recession of the glaciers is slower almost than the calculation of the Hut Bill for the party, beds without, and beds with - I never found what with - 68 cups of 'chi' and 115 pieces of 'brod' etc.

#### Sunday August 27th.

Our loads were shared more carefully but it was still a long drag. We covered most of the ground in the cool of the morning. Through the forest it was pretty hot but we were in better shape than we had been 3 days before. Back at the road we repacked the Bedford to make room for Bill Birchenough and David Coombs. The Landrover had now left us, for Plitvice with Charles George and Ernle Drax. We joined the Sunday crowds bathing in the lake again at Bled; after a picnic lunch, we were on our way again, along good main roads via Ljubljana to Postojna. For the next few days we were to enjoy the comforts of civilisation; we nearly filled the spotlessly clean little hotel Tiha Dolina in Postojna. We dined in the centre of the town at a restaurant beside the prominent Kastic Institute. Beef steaks and jugs of wine eventually satisfied our increased appetites then we danced madly to a jazzy little band until 11 p.m.

#### Caves in the Reka Dry Valley.

On Monday Gams introduced us to Mr. Egon Pretnar a biospeleologist of note. They both came with us first to Divaska Jama a few yards from the Triest Road at Divaca. Hidden by trees, this had once been a show cave, now a rope ladder was needed since the entrance steps had been destroyed during the war and fallen the 20 odd feet down the sheer walled entrance 'shake' hole. Being near the frontier with Italy, our guides felt obliged to seek the permission of the local police chief. This was given on condition that a "guide" from a nearby show cave accompanied us. It cost us about 200 dinars each and he certainly knew his way through this cave. It has one passage, say 50 ft./100 ft. wide and 100 ft. high - few stalactites, but stalagmites reaching nearly to the roof; several scenes kept the photographers busy. Pretnar was also busy with a tube, sucking up white lice from occasional fragments of rotting timber. More extraordinary however, was the dryness of most of the cave, even ancient wooden handrails had not rotted away except in occasional damp places. In general the humidity of the air was very low and there were few drips.

A second cave was visited in the afternoon after refreshments at Divaca. In a walled scrubby area near the village of Lokev was another similar type of cave called Vilenica. This we explored to the extent of the main chamber. Again very high stalagmites and some curtains. The spacious entrance with its great grey pillars of stalagmite gave an impression of Hades. Fortunately this was not true, as Pretnar's "Bug-Sucker-Upper" couldn't have coped with a three headed dog.

Further South by the village Markovscina was an impressive circular path cut like a great screw thread down a circular pothole. This led to the former show cave of Dimnice consisting of the largest chambers I had seen up

to that time. The second chamber was dimly illuminated with daylight coming through a hole in the roof. A pile of guano which had been Home Sweet Home to countless little brown beetles and white millipedes was raked up with Pretnar's ice axe. The hungry rubber pipe sucked them into its glass stomach. This cave was much damper than the previous two and returning to the first chamber we found it larger than we had first thought, one of several paths led us down a slope towards the noise of running water. There by the ruins of a pumping installation was a stream in a passage where walls seemed strangely bare, (almost the only bare rock we had seen underground in three caves that day). What an interesting change from the all pervading calcite and the massive stalagmites whose tops remained aloof in the darkness beyond the range of our lamps.

Back at Postojna that evening we made our farewells to Gams before he caught the bus home to Lubljana. Gams had given us five days of guiding and leadership and had shown us much of his unique and delightful country of Slovenia. Although a bit hectic at times, without him we should not have done half. Thank you Gams from us all.

During Tuesday morning we accepted Pretnar's invitation to the Museum at the Karstic Institute in Postojna. This was a fascinating place. At the top of the stairs we were greeted by the mounted skeleton of a cave bear (rampant). It is not until you look up to this enormous beast's head that you realise what a terrifying monster he must have been to cave dwellers in the past. Rather like a bull with the agility of an Ape, I am relieved to know they are extinct. There were many examples of cave formations, some of them sectioned and polished. They came from many different parts of the world but we did not see a single British specimen there.. Attracting much attention too were large scale models in section of some of the caves. Maps, too showed many cave surveys; whilst a distribution map in relief caused us to wonder why there were so many in some limestone areas and none in others. Had hydrological conditions not favoured cave formation or are there caves still concealed? That is a question for the Yugoslavs to sort out in time, not one to be answered during a short holiday.

#### Postojnska Jama.

In the afternoon we had arranged for a trip into this famous show cave just outside the 'town'; we walked across a 'square' in front of a building like a main railway station. With hundreds of other tourists we bought tickets and entered the Portals. A short passage brought us to a 'crazy tube' station. We walked a long way towards the back of a train of open carriages packed with people speaking every tongue we could think of. At last we came to little polished wooden benches that were unoccupied. The train, hauled by a battery-electric loco. seemed to be constructed of fancywrought ironwork and wood. In a few moments the last of the 200 seats filled. I half expected Emmet's train to pass us on the 'up' line. The train pulled out. For the rest of the passengers a fantasy was starting, for us it finished, for this was caving in comfort. We trundled along through 3 km of passage and chambers, the degree of electric lighting gradually increasing. We passed countless stalagmites but I don't recall any particular ones; massive anonymity! When the train stopped we went with a party of Finnish students and met our new guide, Zlatko Pepionik.

It wasn't long before we were calling this exuberant fair headed Croation, Pepi. Passing the tanks of Proteus I did not then realise how much these rare strange animals had in common with Pepi. The great chamber was rather like walking through Cathays Park at night. From the top of a heap of collapse material we looked down upon formations, around which the little herds of people looked like ants in a jar of barley sugar. We walked through devious tunnels enlarged by man until we joined the underground river Piuka. We came out to daylight again in Pivka Jamma which has an entrance rather like Dimnice. The Finns though not cavers had the laugh on us, for their coach driver had brought their bus round to this entrance to save them a long hot walk back along the dusty road, but they squeezed our drivers in with them. (Did the Blondes squeeze back?)

#### Scotjanskejamma.

Only recently has this river cave been electrically lit, how essential too, we could have seen nothing with miners lamps. A fine passage system leads through the "Silent Cave" (a well decorated dead zone), then joins an enormous river passage. A path cut in the wall gives a fine view of the roof 200 ft. above and the river as far again below. A slender reinforced concrete structure, Hanke's Bridge, enables exposure to be sensed especially when you see the former 'peg and pole' routes of earlier explorers. A fog formed in the lower half of the passage due to condensation from the warm air entering from the next valley. Having become accustomed to the massive formations in this area, this active system was most spectacular.

For lunch we drove to Rokova Dolina (crawfish valley) a beautifully wooded natural park with a river that pops up and disappears every few turns, sculpturing arches and caves on the way. Later we drove to Predjamma. A mediaeval castle, now a museum of sorts, partly fills the gaping entrance to this cave. There are about 5 levels of passages above the present river passage. The level we explored had been dug by archaeologists some time ago. Their unfilled trenches and litter rather spoilt the earlier part. Beyond this we were again walking past the usual large stalagmites; some wooden steps led us through a draughty chaos of fallen blocks into a black chamber. Everywhere was strewn with fallen blocks, mostly covered with blackcoloured calcite.

We came out after dark and navigated a different road back to Postojna. On minor roads here they don't have lights on road repair works nor on the bullock carts which crawl along in the middle or either side of the road. More details of the caves are given in a book "The Cave of Postojna and other Marvels of the Karst" by Alfred Serko and Michler Ivan. Revised 1958 and translated into English.

We said goodbye to the old couple running the hotel on Wednesday morning, we wanted to get further South so drove over to the Adriatic Coast then followed the sea down to the more barren areas South of Rjeka and Senj. A Croatian pot hole was calling us, so was the sea. At places along the coast cold fresh water resurged upon many cave systems below sea level. Some resurgences could be seen hundreds of yards out in deep water, looking like oily pools as this lighter water welled to the surface. We saved our swimming until a little village called Jablanac, the water was deep, warm and clear, we dived into the natural luxury of a little fiord itself bathed in hot sun.

W.H. Little.

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