

SOUTH WALES CAVING CLUB NEWSLETTER

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1. WAEN FIGNEN FELEN 1963

One Saturday night in the smoky beer spilling atmosphere of the Gwyn it was decided that time was again ripe to tackle Waen Fignen Felen. A pencil and the back of a cigarette packet were produced and plans were made.

A winch would be required to haul brackets and boulders out of the shaft, some means of carting the spoil to the dump would be necessary, drilling for shot holes, slings for boulders and above all good solid shuttering to hold back the sides. Pit props, waggon planks, giant steel meccano and scaffolding were each considered and their merits noted alongside the now considerable list of items required for the project. Another list of people who could obtain what we wanted was drawn up and a rough idea of what it would cost was arrived at before Mrs. Price managed to get everybody to the lawful side of the front door.

On the Sunday morning a number of people were able to recall the spele of the night before and it was decided to go ahead with about ten people each contributing £2 and a weeks work to the project. The larger items of equipment would then be sold to the Club if they were wanted, so we could then afford to spend money on capital equipment. Bernard John was prepared to make a winch, John Harvey knew of one he might be able to purchase and John Osborne had a contact who could get hold of ex W.D. balloon winches. Bill Clarke was contacted to obtain two tons of timber and to help us cart it to the site and extra transport was recruited by bringing David Terry and Phillip Mathers plus their Land-Rovers into the group. David Hunt was then persuaded into doing the carpentry and Dick Baynton, Bernard Woods and Terry Lloyd got to work on a motor provided by John Harvey to drive one of Bill Birchenough's generators for the Kango hammer which was borrowed from Mark Skinner. Roger Smith and David Dilly obtained canvas sheets and a 160 lb. tent for shelter, whilst Noel Dilly and Clive Jones arranged the explosives, boulder slings and tipping bucket. Dick Baynton was put in charge of the treasury and last but not least John Spooner arranged transport for the carpentry equipment required for shuttering. Then last and least came Jan Powell.

A few weeks later the equipment was at Penwyllt, work had started on improving the track to the site and Denis Kemps camera was recording the other efforts being put into the job.

The week before August Bank Holiday was glorious and with temperatures in the eighties, Bernard Woods put the finishing touches to the generator, but on Friday came the rain. Saturday morning Bill Clarke was at the dig with the first load of timber by 9.20 a.m. and by the end of the day it was all systems go with the other two vehicles and all the horde on the job.

The dig was on the side of Paul Dolphin's 1937 - 1948 attempt, which is in a large swallow hole about $\frac{1}{4}$ mile S.W. of Scwd Ddu on the River Haffes. This hole is the main drainage of a peat bog which covers an area of approx. $\frac{1}{4}$ square mile and in normal weather water sinks about 30 ft. from the base of the cliff which forms the southern side of the swallow hole. Due to weathering the cliff face, which is about 50 ft. high, is very friable and except for one bed about $\frac{1}{2}$ way up, it was considered unsuitable for the anchorage of the cable railway. However this problem was overcome and a cable which was laterally adjustable over the top of Dolphin's old shaft was rigged up. Combined with this a stop on the cable enabled the bucket to be positioned where we required it over the shaft. The cable ran from the cliff face over a shear legs used to tension the cable to an earth anchor in the river bank. A pulley block on the shear legs carried the winch wire and the winch was then sited just behind the shear legs. The bucket used was a 10 gallon pail mounted in a tipping cradle. The hauling cable ran from the winch to a running pulley on the cable railway and this pulley was anchored to the cable stop when raising and lowering the bucket and to the bucket when it was being transported from shaft to dump.

The first job was to secure the 12ft. of Dolphin's shaft which remained. One side of the dig consisted of a vast boulder which weighed several tons, another side was solid rock and the rest loose rubble. This rubble was cut back until a vertical face was produced to allow the first set of timbering to be fitted neatly in front of it. Three horizontal timbers each measuring 64" x 12" x 3" backed with half a dozen boards 7" wide and 2" thick. All the timbers used in the dig were scrap from the breaking

up of railway waggons, the larger timbers being either oak or jarrah and the others being a mixture of hard and soft woods. Thirty-four large and seventy-seven small timbers cost £5.

The large boulder, known to previous diggers as GOD, was considered sufficiently wedged to be left alone and with this secure start the rest of the week was spent sinking and timbering the shaft to a depth of 35ft. The shuttering was considerably assisted by the fact that the shaft followed the cliff face and most rounds of timber required only two pieces, each being rammed home with a sledge hammer. The dig was through loose boulders which were either lifted out on the winch using a soft wire boulder sling, or if over 3cwt. were drilled and blasted. The holes drilled were 1" and the usual depth was 3"-4"; these required less than ½oz blaster to split them to the size required. A certain amount of chemical sculpturing was carried out to break off parts of a boulder to leave behind a shape which would take the timbering.

All the equipment worked well and any repairs or modifications required were carried out promptly by the 'digs' welder at Penwyllt. The only snag was the winch wire, which was initially put on the drum too loose. This resulted in the later coils which went on under tension cutting into the lower loose coils. This was overcome by rewinding all the cable under tension.

The bottom of the shaft at the end of the week looked most promising and it was generally considered that only another 6 - 10ft. of digging was required to get to the valley floor and the cave. The stream which was then sinking near the dig, after a week of wet and windy weather, could be heard a little to the left of the bottom of the shaft. The new shaft has wandered a little from the original one, the timbers of which were still in perfect condition, but even if a little tunnelling is required there can only be a few week-ends work left.

Once again "Dolphins Folly" is a going concern, thanks to the efforts of a weeks grand slam and in particular to the Land-Rovers, which were bashed up and down the track at an ever increasing rate all the week.

Those Involved.
(Penwyllt - August 1963)

2. ARTIFICIAL AIDS TO CLIMBING.

This is not a comprehensive list of methods of getting up and down rock, but merely a description of the basic sporting methods and the equipment commonly used.

EQUIPMENT

Ropes. Those chiefly used are of Hemp or Nylon.

Hemp. This is a cheaper but weaker rope than nylon. It absorbs water and consequently will freeze and become unmanageable in cold conditions. Continuous absorption will reduce its strength and care must be taken to prevent rotting.

Nylon. Nylon is accepted nowadays as the best. Its strength to weight ratio is greater than hemp. Its advantages are that it is impermeable, so that it does not become soaked, frozen, or unmanageable in bad conditions. It dries quickly and does not deteriorate as quickly as hemp. Its elasticity and resilience give it greater resistance to shock loading. It is smoother in texture and smaller in diameter than hemp and consequently it is easier to use with karabiners. Its disadvantages are that it is easily abraded. Its thermal conductivity is low, therefore local heating caused by friction can exceed the very low melting point. It is advisable to leave a good length of free end of rope to knots, due to a tendency of knots in nylon rope to 'creep'. There are two main types of nylon rope:- Laid Nylon and Braided Nylon. In purely artificial work the elasticity of laid nylon can be a disadvantage, as much of the secondman's effort is lost in the stretch. Braided Nylon has a central core of straight continuous fibres covered by a skin of braided fibres. It stretches less than laid nylon, has less tendency to kink and a surface which is smoother and slides easily through karabiners. It lasts longer and frays less easily than laid ropes. From an all-round point of view it is superior for mountaineering. However, braided nylon is very expensive and cannot be bought in this country. Its strength improves with use.

Main Climbing Rope.

Nylon is recommended for this. For general climbing use at least weight No.3. Weight No.4. is used only by old men and Americans. For skilled parties and where lightness is essential No.2. can be used. No.1. is ideally suited for clothes lines and tying down girl-friends.

Waist Lengths.

It is recommended that hemp is used for this and not nylon as in certain cases the burning of nylon can be fatal.

Slings.

All weights of nylon are at present being used depending on size of belay, but weight No.1. is definitely not safe as a running belay. In its place we strongly recommend wire slings (obtainable from Clive Jones, price £14 each.)

Boudriers.

This is a variation on the traditional method of body attachment to rope. Basically it is a rope under the armpits. It is designed to relieve pressure on the diaphragm should a fall occur. This method undoubtedly allows you to breathe but produces so many injuries in the process that you may not think it worth while. The boudrier can be tied at the end of the main climbing rope or made as a separate item. If a separate item it should be of hemp.

Cow's Tails.

This is a small loop which is useful for double rope technique. It may be of nylon, hemp or steel wire. It is attached to the waist karabiner and clipped to a piton to take most of the body weight of the leader thus relieving the second.

Prusik Loops. (See Newsletter No. 25 - October 1958)

These are 3ft loops of No.1. weight (or less) nylon. They are used in self rescue from a fall on an overhang and are just about the only way of getting out of such a position.

Karabiners.

There are two main types - those with a screw and those without. There are so many shapes, sizes and strengths that it would be tedious to us (and you) to give a full list. Thus we recommend you to manufacturers catalogues. We would however, like to give one word of warning: if two karabiners are used together, both should be of the screw type. If they are not it is possible for one 'krab' to open the gate of the other. A demonstration of this is simple and shattering.

Pitons.

Despite some experience to the contrary these are not: (a.) undertakers business cards, (b) tin-openers or (c.) novice intimidators. They are, in the right hands and the right cracks, invaluable aids to climbing. On all but artificial routes pegs should be used as safeguards only. There are an infinite variety of shapes and sizes. Experience dictates which should be used where, but generally those with the eye at right angles to the blade are of more use. The short leaf shaped variety are useful in the limestone of South Wales and the wood panelling of the Gwyn. When buying pitons make sure that the eye is big enough to take two 'krabs'. Very large cracks can be pegged with wooden wedges.

Piton Hammers.

The weight of such hammers should be 15 - 20 oz. They must be attached to the climber. A loop round the shoulders is the preferred method - the loop must be long enough to allow the climber to work with outstretched arm.

Chock Stones.

Assorted sizes of hexagon nuts (with the thread filed out) threaded on to a sling are very useful for wedging into cracks that are too wide or too shallow for pitons. Clive Jones has recently acquired assorted sizes of large talyright splices which serve the same purpose.

DOUBLE ROPE TECHNIQUE.

The leader and second tie on to two ropes of different colours. The leader carries pegs, either on 'krabs' on a sling around the shoulder or on a special metal piton carrier (a loop of metal with a light spring gate), a hammer on a sling as previously explained and two or three etrier steps initially tucked over one shoulder and attached to his waist loop by light cords (woven terylene the thickness of a boot lace and 4 ft. long). The second man also carries two or three etriers and a hammer. Both have cow's tails attached to their waist loops.

The Moves: (Starting from a belayed stance).

1. Leader knocks in peg and attaches 'krab'.
2. Clips in white rope.
3. Hooks on etrier using fifi hook (two etriers for comfort if overhang is excessive).
4. Asks for tension on white and steps on to etrier.
5. Clips in cow's tail to 'Krab' on peg.
6. Leader knocks in second peg as high as possible.
7. Clips in 'krab' and red rope.
8. Hooks on other etrier.
9. Unclips cow's tail.
10. Tells second "take in red, slack off white".
11. Moves up to upper etrier. The lower etrier will detach itself automatically by the pull of the cords from the waist length to the fifi hook.

The whole sequence is now repeated until rope, strength or patience run out.

The second man follows the same moves but takes out pegs as he passes them. He may find it helpful to attach one etrier to the foot of another so that he can climb back down to remove the previous peg.

Double rope technique is very strenuous for both men. As the ropes become threaded through more and more 'krabs' their pull on the leader becomes tremendous and threatens to pull him off at every move. Things are just as bad for the second who has to use all his strength and at least four pairs of hands to control the double belay system.

ABSELLING

Short of falling off this is the quickest method of coming down a face.

It is a controlled slide down a rope. There are many methods the oldest being the best. This is the classic 'Dulfer' method or to give it its more descriptive name the 'hot seat' method. The victim stands facing the rope places it between the legs, behind the thigh, across the chest, over the opposite shoulder and holds it across his back.

A more comfortable method is to use an abseil sling which is wrapped around the thighs and back and fastened at the front with a 'krab'. The abseil rope passes through this 'krab' and over the shoulder.

In recent years numerous pieces of ironmongery have been fashioned to take the 'ouch' out of abseiling. These are attached to the waist length with a 'krab', the abseil rope passes through the device only (not around the body) and is easily controlled by hand pressure.

It is our personal opinion that these devices are more trouble than they are worth. Of the types that we have used, one burns the rope, one comes off the rope, another melts half way down and the last is more suited to giving rude signs.

Hugh Lloyd and Colin Baglin.

3. CAVING POTENTIAL OF THE PYRENEES - ARIEGE AREA.

In August a party of Birmingham cavers, representing several clubs, including S.W.C.C. spent a fortnight in the French-Spanish Pyrenees. The caving potential of this area is tremendous and is here recorded so that others can be better informed.

One week was spent at Orgibet, Ariège about 40 miles from Toulouse and is near to Moulis. The area is chiefly limestone and contains such caves as Gouffre Martel, Cigalere and Henne Morte. Our french contact showed us several caves in the region, one called Ruisec was a cave of vast proportions having a main passage 200ft x 100ft. for 150 yds. In the main chamber was a scree slope 200ft high, even then it ended 40 ft. from the roof! It was like climbing a mountain at night. Deep in the cave was a cascade falling 200 ft. leading into a smaller, active, series of passages.

The caves generally are subject to rapid flooding so care must be exercised if descending to the sumps

The pot holes in the area seem to be typically about 300ft. deep and we were

limited, by tackle, to a modest one of 120ft. Even in this the possibility of digging an extension is excellent. Our french speleo then showed me several pot-holes in the area, most which he had discovered himself. There are no local clubs, Toulouse being the nearest centre, and as the hills are wild and thickly vegetated, the chances of making an original discovery are very good. If time is limited it is advisable to have a contact who knows where the caves are. The locals, however, are extremely obliging and may well be able to help in this matter.

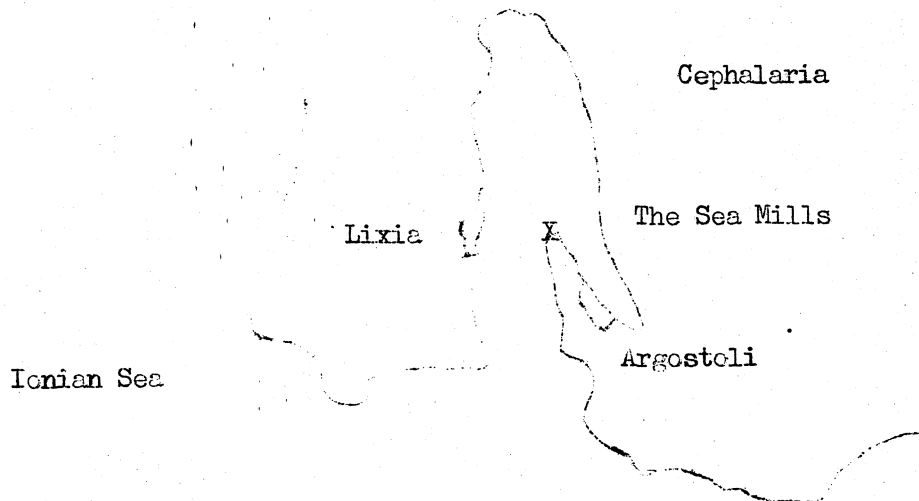
We also spent four days up the Maledetta, the 'accursed mountains' in the Spanish Pyrenees about 10 miles from Viella. There is an extensive limestone area at around 6,000 ft and it is here that the Garonne rises from a great resurgence. The sink at the Trou Du Torro is impenetrable but upstream in the Valleta de Venasque there are several small caves. The river disappears for half a mile and its course can be followed for a total of 250 yds. through small solutional passages now being enlarged by flood waters. The rock is a poor quality marble and makes a beautiful, white passage. Next day this cave was taking flood water.

Further upstream is the Escaletta, a cave just above the stream bed, but it climbs steeply, showing excellent solutional markings. Thirty feet up, the roof showed an expanse of spongework, then the passage rose steeply and due to limited tackle, we were forced to turn back. The region is largely limestone covered with glacial drift, mostly of granite. Higher upstream there are several larger caves described by Casteret, therefore I advise any future parties to carry normal gear up with them to enable a full exploration of these river caves to be conducted. This is surely the area to discover new caves, for the Garonne flows underground nearly three miles and under a mountain at that. The locals are very helpful and the scenery is magnificent.

J.V. Osborne.

4. THE SEA MILLS OF ARGOSTOLI

Argostoli is a town on the S.W. side of the Ionian Island of Cephalonia, the neighbour of Ithica the home of Odysseus. It is situated on the inner side of a long narrow peninsula of limestone which forms the harbour of Argostoli



The mills were on the northern extremity of the peninsula about one mile from the town. There were two mills, the first established by an Englishman, Dr. Stephens, in 1835 and the second in 1850. The mills were driven by under-shot waterwheels taking power from a salt water current conducted from the sea by artificial channels. Fuller (1) states that the mills were closed down in 1907 because of competition elsewhere, but the Mediterranean Pilot (2) mentions that in 1927 a mill and ice making plant were being driven by sea power. The mills were badly shaken by the earthquakes of 1953 when Argostoli was destroyed, the buildings were destroyed and the water flow reduced to an estimated one eighth of the original flow. There are now (3) several rough channels leading inland from the water's edge, partly natural but with artificial improvements. The water is flowing very slowly into a small number of narrow rifted sinks which are heavily clogged with decaying vegetation and digging prospects don't appear good.

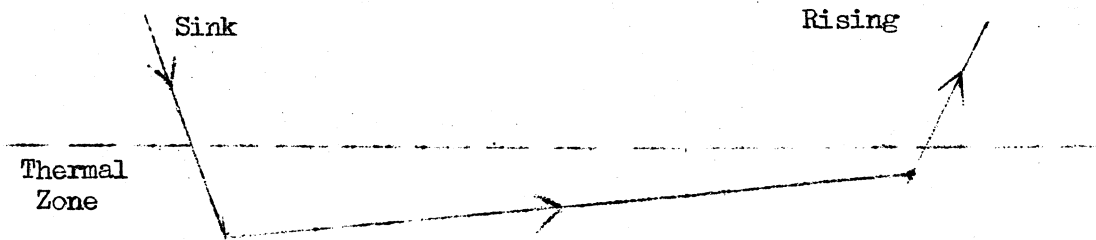
The sea originally entered the land at four points before being absorbed into the limestone. The Crosbys (4) state that absorption takes place generally along the coast for about half a mile, whilst Reclus (5) says that absorption occurs at various points on calcareous coasts especially of Greece and the Islands. Flow was given by Reclus as 55 gallons per minute, but the Crosbys give 33 gallons per minute, neither flow was based on actual measurement. The second mill reduced the flow of the first so it is probable that only one subterranean channel is used. The outflows from the mills were two artificial channels 4-6ft. wide, the sinks were artificial pits the bottoms of which were 3ft. below sea level.

Cephalacia is formed mostly of blue-white cretaceous limestone some thousands of feet thick. The land rises to the south of the mills to a height of about 300ft. some five or six miles distant. Strickland (6) says that the island is composed of "hard white limestone, abounding in faults and fractures as well as caverns, subterranean rivers and thermal and mineral springs". The Crosbys say that caverns and sinks occur throughout the island. Well boring in Argostoli encountered a cavern 200 ft. high at a depth of 225 ft., well below sea level. The limestones lie on ancient crystalline rocks. According to Fuller no saline

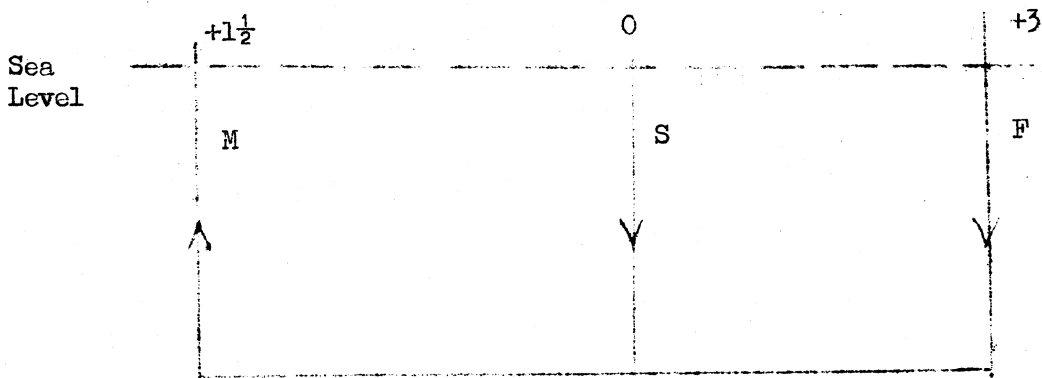
springs occur on the island or adjacent mainland. The fissures occurring on the island are enlarged joint cracks and it is possible that the deeper passages are similarly formed. The island lies within an earthquake zone.

One solution to the problem of the circulation system of the mills is given Gambier (7) who calls The Mills "one of the unsolved mysteries of the world". He goes on to state that "Millions upon millions of tons of water rush daily down into this bottomless pit and have been so running for millions of yearsobviously it cannot merely connect one sea with another for, in process of time, however vast the subterranean caves and hollows into which it pours, they would ultimately fill up and the seas would stand at the same level As there is no possible scientific solution to the mystery it is permitted to anyone to theorise, and mine is that this mighty deluge of water reaches internal regions where the temperature converts it to steam, which, rising up into cavities, is condensed by coming into colder strata and forms rivers of fresh water, perhaps over the whole globe....."

Fuller states that the flow has almost certainly continued for several centuries and that it is too great for evaporation, chemical combination or absorption and so it must be part of a circulatory system. The simplest system is that given by the Crosbys who suggest a thermal system where the circulation is produced by the application of heat on the long arm, which reduces the density of the water.



Fuller himself suggests a system based on the mixing of two streams of differing densities. The specific gravity in the Mediterranean in the vicinity of the Ionian Islands is 1.03. Suitable dilution water could come from natural underground seepage towards the sea and from underground drainage. Some dilution is almost inevitable. Fuller puts forward the following mechanism.

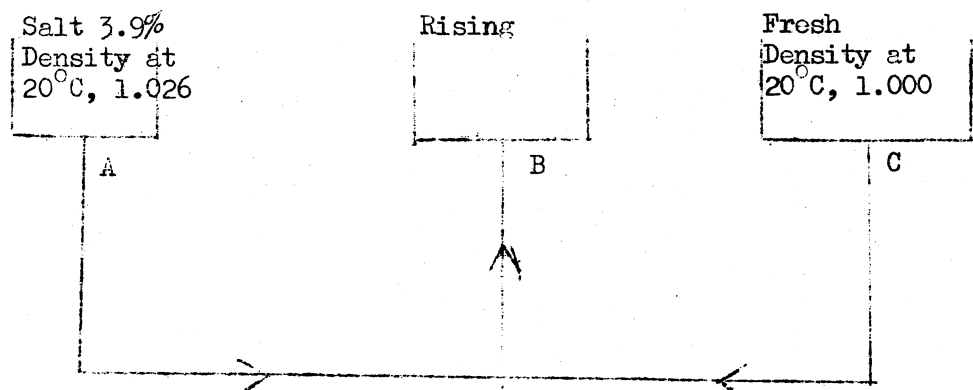


If we assume a 50% dilution of the sea water the heads would be as shown. If the fresh water column, F, has a greater weight than the salt water column, S, the latter is forced back and a rising results. Otherwise F will back up until pressures are equal, mixing begins and circulation is made effective by the lower density of the resulting mixture M. The size of the passage will affect the mixture; if F has half the area of S the mixture will be $2/3 : 1/3$. An outlet above sea level is more favourable than one below sea level; if the outlet is below sea level the flow will diminish until, with the outlet below the bottom of S, no flow is possible.

Fuller rules out the possibility of suction because air currents underground are the result of the flow of water rather than vice versa, discounting normal cave currents which he considers too feeble. He suggests that as the underground passages are water filled below sea level only moderate heads will be available so high velocities are ruled out. There are no obvious risings but as there are only moderate heads, risings will be at no great depths.

He goes on to compare the effects of thermal and dilution systems. A 50% dilution of a saltwater column at 63°F . will give an increased head of $1\frac{1}{2}$ ft. with a 100ft. column, whilst the increase due to a 1°F . temperature rise is only $1/100$ ft. The increase of head on a 2,000ft. column and 50% dilution is 30ft. whilst the equivalent temperature rise from 64°F . to 84°F . gives a head of $5\frac{1}{2}$ ft. To bring about the flow at Argostoli, assuming a 50% dilution, a column 200 ft. is needed whilst, with the temperature hypothesis, a depth of 1,600 ft. is required.

Hartwell (8) simulated a circulatory system using glass tubes and coloured water.



All the vessels were maintained overflowing and the height of C was varied. When A, B and C were at the same level salt water flowed from A to both B and C. With C $\frac{2}{4}$ " above A and B both A and C flowed into B, and when C was 1.2" above A and B, fresh water flowed into A and B.

There are unconfirmed reports that geologists of the U.S. Mediterranean Fleet used a large amount of fluorescene in an effort to trace the rising, without success. However a search for risings in the sea floor in the locality and an analysis of the water from them might prove interesting.

Mike Duerden.

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2. The Mediterranean Pilot Vol.III, 1957.
3. C.Owen George. Private Correspondence 1962.
4. F.W. Crosby and W.O. Crosby. "The Sea Mills of Cephalonia" Technical Quarterly IX 1896 p.p.6-23. The British Museum were unable to trace this magazine and all extracts from this article came from (1) above. It is possible that the Technical Quarterly was published by the Massachusetts Institute of Technology and has since 1896 suffered a change of name.
5. Reclus "The Ocean" p.146., quoted in (1) above.
6. H.E. Strickland. Proceedings of the Geological Society of London . Vol.(II) 1835. p.572. Quoted in (1) above.
7. J.W. Gambier. "Links in my Life on Land and Sea". Published by Fisher Unwin, 1906. Also Journal of the Craven Pot Hole Club No.5. p.214.
8. J.M. Hartwel. Private correspondence 1963. The Encyclopedia Britannica also gives the following references;-
9. C.Fellows "Journals of an Excursion in Asia Minor in 1838"
10. C. Wiebel "Die Insel Kephalaria und die Meermuhlen von Argostoli". The first of these contains no reference to the Sea Mills, the second is available in the Slavonic Room of the British Museum.

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5. HEPSTE VALLEY - CAVES ETC.

1. OGOF BLAEN HEPSTE NGR 964.128, cave first explored by B.N.S. Speleo Section 17th Feb. 1962. Resurgence with some 50ft. of flooded passage. Waist deep near furthest upstream point then sumping. Probably result of underground drainage from dry valleys at NGRs 953.135 and 962.138, from Mynydd y Gam. No draught. Four entrances alongside ruined farm-house of Blaen Hepste
2. Portion of River Hepste sinks on a bend amongst masses of Old Red Sandstone pebbles. NGR 957.123.
3. Main sink in average and dry weather. Narrow fissures in bed of river, near south bank. Partly cleared by BNS on 28th October 1962 without being able to enter a passage. Dam erected so that all water would flow into the sink in an attempt to 'flush' it clear. In dry weather river bed is dry below this sink. NGR 956.122.
4. Fissure dug out by Norman Tuck of BNS on 1st. October 1962, NGR 952.118 Consists of a rift about 25ft. deep with 2 pools and a sump. A draught was noted in one fissure leading off above one of the pools, but the fissure was too narrow for entry. Also explored on 28th October.
5. PWLL HEPSTE. Discovered and dug out by BNS on 25th February 1962. First entered by Ian Butterworth. This is a fissure in the centre of the river bed which takes water and is usually full of water, in wet weather. The hole cleared is 2ft. wide, 4ft. long and 25ft. deep, but it could be enlarged if required merely by pushing down red sandstone pebbles which are jammed across the top of the rift. At the bottom the rift is blocked on the downstream side by a sump which absorbs a small stream even in dry weather running along the floor of the rift. The upstream side was first explored (when the pebble roof had settled down) on 1st. September 1962. A passage ran for 50ft. to a constriction over a pool; this could easily be negotiated by a thin person and there is a slight, but inviting, draught. The mouth of the fissure is only a few yards from No.4. which lies in the north bank of the river, so the NGR is also 952.118.
6. OGOF GLAN HEPSTE. Discovered by S.W.C.C. and mentioned in 'The British Caver' 1950, Volume 21, page 78, NGR again 952.118. The entrance is a rift running to the South East from a pronounced bend in the river bed. It only takes water after heavy rain and can be found some 50 yds. downstream from fissure 4 and 5 i.e. Pwll Hepste. A few yards in there is a knee-deep pool, then the passage assumes an oval (widest horizontally) shape with well marked scallops on the walls. Altogether it is 150 ft. long approx., and ends in a sump. This cave was first noticed by BNS on 17th February and explored on the 25th. when N. Tuck, wearing an immersion suit, tried, unsuccessfully to find a way on through the sump. The sump was plumbed with a line and found to be 17ft. deep.

7. OGOR HEPSTE 2. (A Ogor Hepste). NGR 952.118. Discovered, explored and surveyed by BNS on 1st. September 1962. The entrance is about 30yds. downstream of Ogor Glan Hepste and is a small hole barely 2ft. high situated in the south bank a few feet above river bed level. It can also be entered (by thin persons) through a hole actually in the river bed as shown in the survey, but this route probably becomes blocked with pebbles after flood times, as in fact it was when discovered. The cave extends for 85ft. to a sump, found to be 17ft. deep, as in the case of No.6.
8. A small cave at NGR 938.097 in the dry bed of the Hepste, consisting of a chamber necessitating a flat out crawl, roofed with millstone grit and floored with pools of water on pebbles and sand. No draught. Only 10ft. long.
9. OGOR TARDIANT HEPSTE. The Main Cave, NGR 936.098. This is a large entrance some 100 yds. up the dry bed from the Hepste resurgence. It has always been well known to geologists because of its faulted exposure of limestone as an inlier, and a stream which flows from fields to the S.E. sinks into fissures at the entrance of the cave after forming a tiny 20ft. waterfall actually over its mouth. After heavy frost the waterfall forms a spectacular curtain of icicles which have to be smashed to gain entry to the cave (e.g. 27th. Jan. '63.) The cave is known to have been noted by speleologists, but nothing was written about it until BNS explored it and dug out a new passage on 17th March 1962.

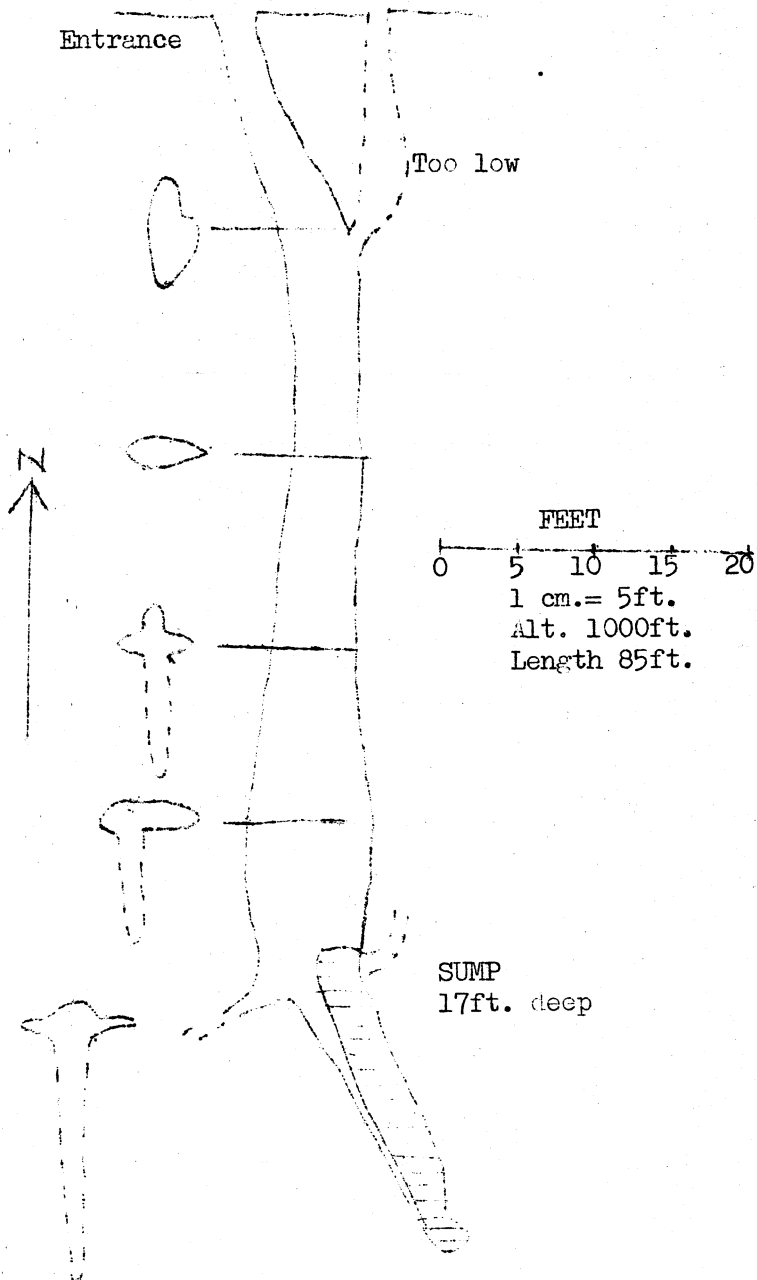
From the main entrance it is possible to go in two directions, left to a stream passage and right to a low tunnel which soon becomes filled with clay (digging tools obviously many years old were found here, coated with flood-borne silt.) The stream passage holds a small stream which sumps both up and down. On the 17th March the walls of the gorge outside the cave were examined carefully and one cavity, filled with flood debris, was found to be a bedding plane entrance. This was cleared and a flat-out crawl led within 30ft. to a downstream continuation of the stream previously seen flowing inside the 'main cave'. The crawl opens suddenly into the stream passage and it is possible to stand upright and proceed downstream, in chest-deep water (upstream lies the sump). This deep portion ends after 20 ft. in a sump, but in the roof a hole was found which after being cleared of drift wood, gave out a draught and a tremendous, distant roar of water. It is believed that the roar is due to the main Hepste river, but to reach it the sump would have to be dived, or its roof brought down by blasting so as to enlarge the 'draught hole'.

A more promising dive would be hard to find because it could well lead to the underground Hepste river flowing in a sizeable passage with, judging by the noise, a free air space.

10. A cave only a few yards down river of Ogor Hepste 2 and called Hepste cave No. 3. or Y DRYDEDD OGOR HEPSTE. This was discovered and opened by BNS on 28th. October 1962. and consists of a low bedding plane running for 30ft. to an area where it becomes too low for further progress. A draught was noted but this was considered to be a local one circulating between a group of fissures.

OGOF HEPSTE No. 2.

Hepste River Bed (dry)

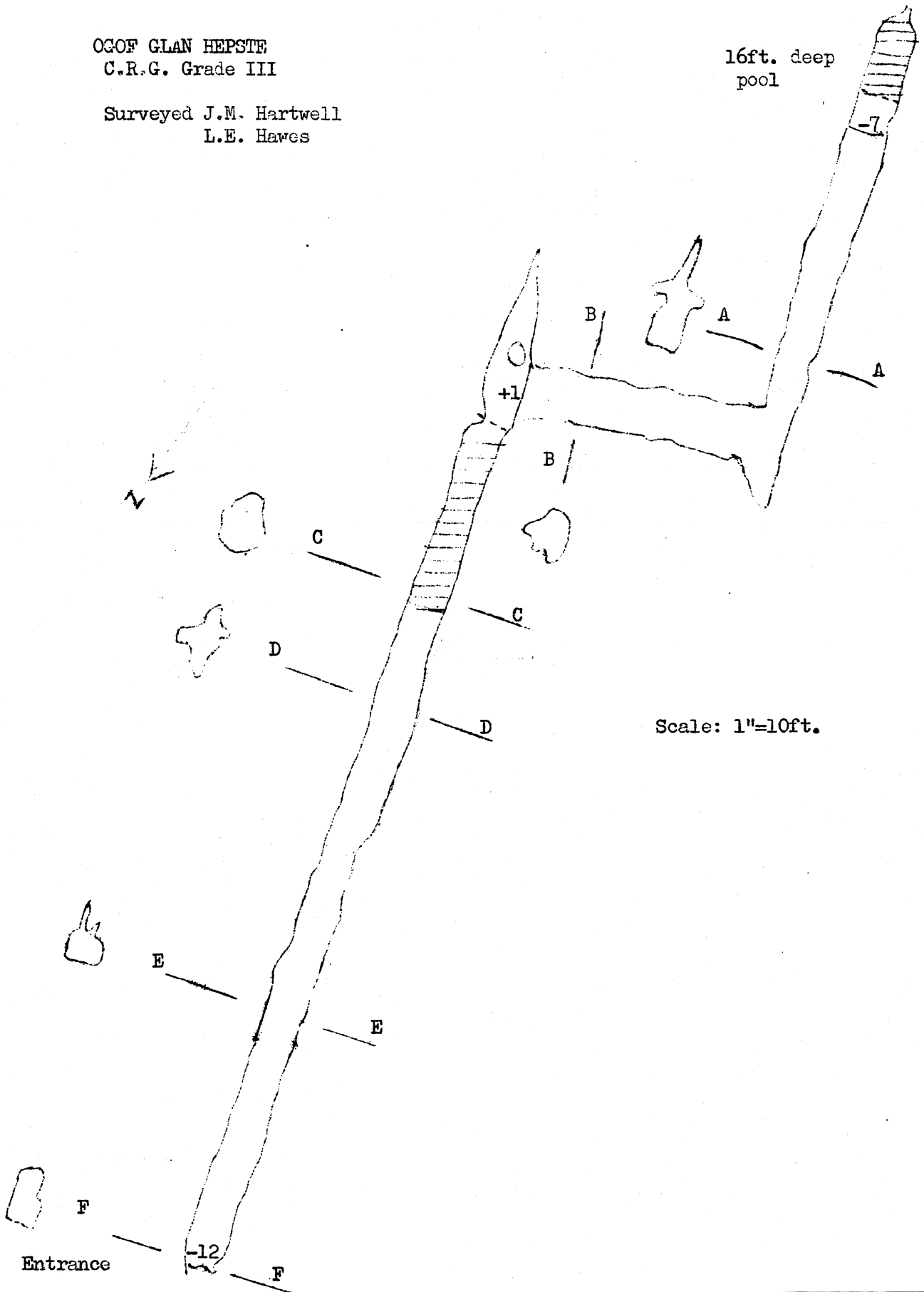


Discovered and surveyed by R. Sullivan, D.A. Parry and M. Davies, B.N.S.S.S.
C.R.G. Grade IV. N.G.R. 952118 1st. Sept. 1962. Copyright M. Davies.

OGOF GLAN HEPSTE
C.R.G. Grade III

Surveyed J.M. Hartwell
L.E. Hawes

16ft. deep
pool

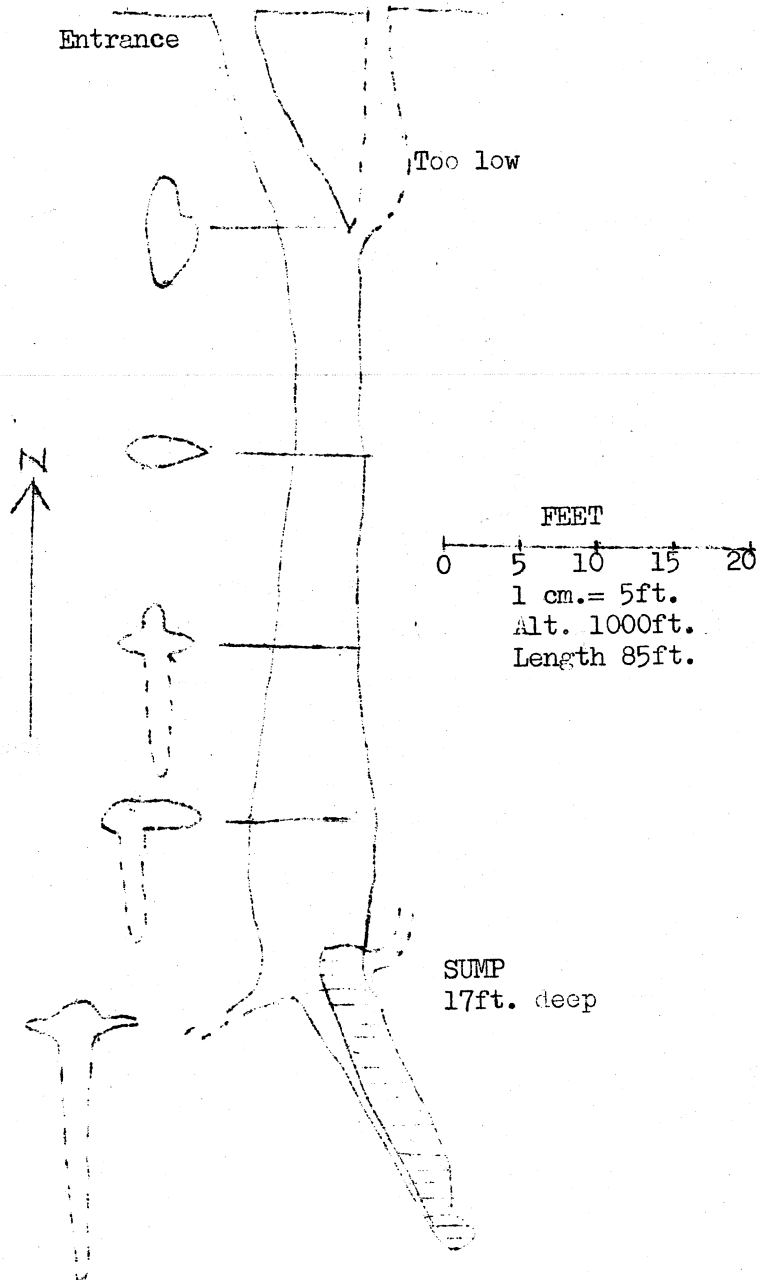


Scale: 1"=10ft.

Entrance

OGOF HEPSTE No. 2.

Hepste River Bed (dry)



Discovered and surveyed by R. Sullivan, D.A. Parry and M. Davies, B.N.S.S.S.
C.R.G. Grade IV. N.G.R. 952118 1st. Sept. 1962. Copyright M. Davies.

CONCLUSIONS.

Although the River Hepste has an underground course of some 2 miles, a route into this system has not yet been found. A number of sinks exist in its bed and their activity depends upon the weather. Four of the caves known below the main sinks end in sumps, two of which are 17ft. deep so the route into the system should probably be sought a little S.W. of this neighbourhood. An easier route might well be found through the sump in the Main Cave near the resurgence but this part of the system becomes flooded after any heavy rain.

People concerned with the above explorations were Russell Sullivan, Mel Davies, Norman Tuck, David A. Parry and Ian Butterworth.

Mel. Davies. 17:8:63.

6. CORRESPONDENCE, CLUB NEWS, O.F.D. LEADERS LIST

ARCHAEOLOGICAL DIG AT THE LESSER GARTH CAVE, RADYR. INTERIM REPORT.

During a trip into the Lesser Garth cave in April this year, I picked up some small sherds of Roman origin from a heap of rubble near the entrance and decided to return later to make a thorough search for further material.

I made several trips and recovered some 20 or 30 sherds, mostly of Roman fumed ware which is not in anyway uncommon. However, I had also found two sherds of 12th Century origin which indicated Norman occupation in the cave.

By this time enough rock had been removed to make the dig rather unstable and it was due to our efforts to make it safe that a large fall occurred. This fall brought down with it a human jaw bone and also a femur. With these finds the scope of the dig was greatly increased and was attacked with renewed fervour.

Unfortunately, from this time on we have been hampered by more falls and increasingly confined working space. However most of the bones from the skeleton have been recovered together with some 570 animal bones. There still remains the skull which is probably buried quite deeply in the loose rock from the fall.

Two objects found since the fall have caused a great deal of excitement. The first is a piece of flint tool, probably a Neolithic chisel, a culture which was hitherto unsuspected in the cave and second a rim shard of Dark Age 'E' Type pottery which is very uncommon in this area.

During the whole of the dig I have had the welcome support and help of Dr. Savory of the National Museum and when I showed him these last two finds he was most impressed and suggested that the dig be carried out on a much larger scale, offering tools, financial help and expert help on site when the dig was cleared of most of the rock.

There is a quarry company near-by which owns the land, however, and their operations are getting very close to the cave. Meanwhile there are many tons of rock to be moved, a task which will be long and arduous. However as the site has all the evidence of being a very important dig we are pressing on.

I would be very grateful if any members of the club would come along and help, especially those who specialise in digging and blasting and also, of course, the archaeologists.

M.S. Hussey.
16 Gastan Road,
Pontyclun,
Glam.

NOTE ON WATER DIVINING

Although I am not a believer in the divining rod as a scientific instrument those who are might be interested in the following extract from a paper on Electro-osmosis.

"Schaad and Haefeli (1) called attention to the possibility that the concentrated seepage through the voids of a soil might create a field of electric currents which might be felt by some human beings. I consider it not impossible that supersensitive electronic instruments could be developed which would detect the difference in the electric fields over an aquifer and the adjacent areas where seepage is much less or non-existent. Based on empirical correlations this might permit a rough estimate of magnitude and depth of the ground water currents. As to the possibility that at least some of the successful applications of the divining rod might be due to an extraordinary acuteness of certain senses of some human beings, it might be pertinent to recall Galvani's classical experiments in which he activated a dead frog's leg muscles by a small electric current.

Electro-osmosis is a process, now being used to water proof-buildings, in which when an electric-potential is applied across soil or clay water moves towards one electrode and away from the other. Thus when water is forced through soil or clay small electric potentials will be present."

Extract from ELECTRO-OSMOTIC STABILIZATION OF SOILS. by Dr. Leo Casagrande, Journal Boston Soc. Civil Engineering. Jan. 1952.

(1) Shaad, W., and Haefeli, R., Die Anwendung der Elektrizitaet zur Entwaeserung und Verbesserung feinkoerniger Bodenarten, Strasse und Verkehr, Vol. 32, No. 23/24, 1946.

John Hartwell.

ANOTHER FLUORESCEIN TEST IN CWM DWR.

A few ounces of dye placed in the drain had not appeared in the main stream of the new extension after three hours. It was seen at the Ffynnon Ddu rising after 36 hours.

TWLL GLAN TWRCH 22/793187

Walking over to the Twrch the inevitable "promising looking solution hole" was seen. A few stones were removed and about ten feet of genuine cave found. A very small stream sinks here but the hole is very near to river level.

J. Hartwell, M. Duerden.

OGOF Y DEFAID MEIRW and OGOF LLIWIOG

Ogof-y-Defaid Meirw is one of the caves mentioned in an excellent article by Fortnum and Mansfield reprinted from the M.N.R.C. in our newsletter No.38.

It is now apparent that this cave is Ogof Lliwiog and included in our records. It does seem rather 'sour grapes' to say 'we found it first' and this is of no importance. It is unfortunate that this sort of confusion arises so often with our smaller caves.

For the record:-

Ogof Lliwiog also known as Ogof-y-Defaid Meirw SN916125
S.W.C.C., N/L., 38. (British Caver, 34, p.88)
British Caver, 35, p.17.

The other cave mentioned in the M.N.R.C. article is in the large solution hole beside the road at SN 916127. May I suggest Pwll-y-Ffordd Cave.

J.M. Hartwell.

ARTIFICIAL AIDS IN MOUNTAINEERING.

BY GEOFFREY SUTTON (1962) 60 pages 3/6d
The Mountaineering Association, 102a. Westbourne Grove, London, W.2.

This book is packed with information on technique and equipment. It is approved by the M.A. as a teaching manual and as such is a must for anyone contemplating climbing on our limestone cliffs.

From a purely caving aspect it has little to offer that cannot be bettered underground by Rawl Bolts, Maypoles, Skyhooks, Uppit, and lightweight ladders.

J.M. Hartwell.

SOME USEFUL TIPS FOR THOSE ABOUT TO MAKE A 'WET SUIT'.

If using neoprene tape it is advised to pre-stretch it at least twice its normal length. If prestretching is not done the suit gives the impression of being gradually worn in (This is the neoprene tape stretching.)

In the C.R.G. publication of 'Some Technical Aids to Caving' by members of the S.W.C.C. it is stated that the zip be as long as the jacket. Those who are

fortunate enough to possess wet suits will tell you that it is often quite a struggle to get the zip started. It is therefore suggested that the zip be about 2" longer than the jacket.

These tips were obtained from Sub Aqua Supplies by myself earlier this year.

D.F. Dilly.

A LIST OF WATER TRACINGS CARRIED OUT IN SOUTH WALES.

A list of untested sinks and risings is being made and details of any tests carried out in S.Wales and not listed below would be welcome.

- Harvey, P.I.W. 1948. Notes on water tracings carried out from Pwll Byfre and Sink-y-Giedd. C.R.G., N/L.15. 35oz. of fluorescein placed into Sink-y-Giedd appeared at Dan-yr-Ogof 50 hrs. later. 6oz placed into Pwll Byfre appeared at Ffynnon Ddu 48hrs. later.
- Hunt, D. Digging prospects by C. Jones S.W.C.C., N/L 44. Proved Connection of Waen Figen Felen to Dan-yr-Ogof. In wet weather the dye took 8hrs.
- Jenkins, D.W. 1956 Fluorescein test in the Nant Byfre. S.W.C.C., N/L.16. 8oz. placed in the Nant Byfre sink on opp. bank below the farm near Pwll Coediog was seen after 15hrs. in the first Tawe rising below the Gwyn Arms.
- Harvey, P.I.W. Private Comm. Proved connection of Bridge Cave stream to same rising as Pant Mawr.
- Holmes, I. 1962. Field tests of Rhodamine B in Ogof Agen Allwedd. C R.G., N/L.84. also B.C. 36, p.p.67. also H.C.C. N/L 14. Proved connection of Midsummer stream to the far end of Coal Cellar Passage and then into the Clydach river.
- Davies, M. 1962. Use of Durazol Orange - nylon detectors. C.R.G., N/L.84 10lbs. of dye proved the connection of Agen Allwedd water to the river Clydach, 80 yds upstream from Devil's Bridge. One pound in Eglwys Faen did not register in the Cliffs of Dover (Agen Allwedd). 12lbs in Mynydd Llangattock Swallet did not register at any of nine risings.
- Davies, M. 1962. Water tracing in Agen Allwedd. B.C. 36, p.p. 19. Swiss passage connects to Draught passage of old series. Mainstream connects to the Clydach, near Devil's Bridge, took 5 days.
- Davies, M. Private Comm. Two attempts using the Durazol Orange-nylon method have failed to prove a connection between Ogof Fawr and the Hepste.
- de Graaf, B and C. George. 1960 Two Dives in South Wales. S.W.C.C., N/L 33. White Lady to Cwn Pwll-y-Rhyd. This connection has been proved by several people using dyes and has now been traversed by divers.
- Ystradfellte bridge obviously connects to Porth-yr-Ogof and has also been proved by dye tests.

S.W.C.C. 1963. A Radio Survey of Cwm Dwr Jama. S.W.C.C.,N/L.44.
Fluorescein placed in the Horseless carriage dig was observed
in both sections of the stream.

Duerden. M. 1963. S.W.C.C.N/L.
& Hartwell J. Fluorescein placed into the drain was not seen in the new extension.
It appeared in Ogof Ffynnon Ddu.

WILL'S CAVE stream which sinks via Ogof Coed-y-Ffrynau rises in
the Byrwir, a pool at the confluence of the Melite and the Sychrhyd.
This connection has been proved by the muddy water from the
Silica Mine.

J.M. Hartwell.

LIME KILN COTTAGE

The terms upon which the Forestry Commission is prepared to allow the Club
to use the above cottage have now been agreed and are set out below:

1. Cottage Building. The cottage may be used entirely at your own risk.
2. Access. Access to the cottage must be over a route agreed by the Forester in
charge at Gower Forest.
3. Gates. All gates must be closed immediately after use.
4. Fire Precautions. All reasonable precautions must be taken to guard and
protect the Commission's plantations against fire and other causes. Any
instructions given by the Forester in charge from time to time must be com-
plied with.
5. Damage. The Forestry Commission to be reimbursed by you for damage done
to the Forestry Commission property as a result of this permission.
6. Excavated Site. The site to be left in a safe condition at all times so
that there is no possibility of injury to other persons.
7. Notification of Visits. Each and every visit to be notified to the Forester
in charge beforehand. This may be varied by the Forester who may also in
his discretion, refuse to allow a visit on a particular day or days.
8. This permission will run from the date hereof and will be determinable by
either party giving the other of them one calendar month's notice expiring
at the end of any month.

Conservator, South Wales.
1st. July 1963.

CAVE RESCUE.

With the object of locating potential danger spots in South Wales Caves a
log book is to be kept at the Club H.Q. in which it is requested that all
'near miss' accidents should be reported.

NIFE CELLS.

My first miners' Cap Lamp was a Nife NC 113C, bought in 1954 and is still going strong, so I have a high regard for these lamps. I may be heard to curse them in a squeeze, but that's a small price to pay for their many other advantages.

When the club obtained some ex-NCB Nife lamps recently, I got a couple of theses. They had been lying idle but charged for one year, yet immediately gave a full 10 hrs. light on main beam, so it is obvious that these lamps are a very good buy indeed.

Instead of the normal steel vents to the cells, however, they are fitted with plastic vents and it seemed to me that electrolyte could spill through these vents also, I broke one of the vents when topping up with distilled water. Being in Redditch recently I called on Nife Lamps limited and had a long and interesting talk with a representative from their Miners Lamp department. He stressed that the plastic vents should be replaced with the steel vents fitted normally - the plastic jobs were a special order for NCB - no other modification of the lamps being necessary. The vents are readily available at about 1/- each and I bought three dozen on behalf of other club members.

It was stressed that the electrolyte is caustic and should never be allowed to come into contact with the fingers, clothing or the eyes. In case of an accident wash immediately with, I think, 4% boric acid, but please check this.

The vents should not be removed when the battery is on charge, otherwise there is a danger of the battery being knocked over and the electrolyte being spilt. During charging the cells gass. Oxygen and hydrogen are given off and escape past the rubber valve on the vent.

The charging rate should be 1.75 amps. Distilled water should be added to the battery from time to time to replace water lost in gassing. Do not top up with electrolyte (this used to be recommended, but it was a special weak electrolyte and it is not now recommended.) If full strength electrolyte is used to top up, the electrolyte becomes too concentrated, caustic potash gets attached to the plates very firmly and the capacity of the battery goes down. This attachment is so strong it may need several charge and discharge cycles, with water in the battery instead of electrolyte, to get the caustic out.

The electrolyte used is a solution of potassium hydroxide with a proportion of lithium hydroxide. This improves the performance of the battery. It is difficult to read the specific gravity of the electrolyte accurately and is not worth bothering about. After a few years use you may wish to replace the electrolyte in the cells. Drain the cells for no more than half an hour after fully discharging the battery. Do not rinse out with water. Do not leave the cells empty as air has a bad effect on them. The electrolyte supplied by Nife is recommended, a club could obtain a bulk supply which means cost per battery is low.

For anyone getting a Nife battery for the first time, this advice may be summarised as follows:-

1. Replace the plastic vents with steel vents, then after that don't fiddle with the batteries, leave them alone.
2. Put the battery on charge immediately a caving trip is finished, so they are always ready for use. You'll be ready **always** for a C.R.O. callout, too.
3. Charge at 1.75 amps for half as long again as you've used the battery. After a six hour trip, charge for 9 hrs. minimum. Overcharging will not harm the battery, will merely bubble off more gas.
4. If the light goes very dim when the battery is held upside down, it is time to top up with distilled water. When you do this wear rubber gloves and mind your eyes - I have been careless and splashed electrolyte on my glasses - once!
5. When the battery is taken off charge it will carry on gassing for a while - just like its owner in the Gwyn - so keep the battery upright or the pressure may force electrolyte past the vents. This means also you shouldn't rush into Cwm Dwr with a gassy battery or electrolyte may leak while you are in the crawls.
6. If, after a few years use, the battery gives less than 10 hrs. light on main bulb, change the electrolyte.
7. After charging, it is a good idea to wash the top of the battery under the tap to get rid of any electrolyte that has splashed out of the vents.
8. Look after your Nife and you should get a good ten or fifteen years life out of it. Will you still be caving at the end of this time?

Dennis Kemp.

MARK SKINNER

We would like to offer our sympathy to Mark Skinner and his climbing partner following the recent accident in which they both suffered injuries.

CONGRATULATIONS.

To Mr. and Mrs Seaton Phillips on their recent marriage. Their present address is 'Golden Chime', Painshawfield Road, Stocksfield, Northumberland and not the address recorded elsewhere in this issue of the N/L.

CHANGE OF ADDRESS

Rhidian Roberts has also changed his address from the one recorded elsewhere in this issue. It is now 8 Albany Road, Blackwood, Mons.

AGEN ALLWEDD, SECOND BOULDER CHOKE.

Following an attempt by persons unknown to reduce the constriction in the section beyond Mud Rose Chamber, a fall of rock occurred which has caused this part of the Choke to become unstable. Visitors are advised to proceed with caution.

SPELEOLOGICAL YEAR BOOK AND DIARY.

John K. Dryden, 1 Beaufort East, London Road, Bath, Somerset, is contemplating publication of a Year Book and Diary which it is intended will contain the following features:-

' Caving Clubs and Societies in Britain and throughout the world.

All the caving areas in Britain, with all Major systems listed and map referenced. Details of access and local accommodation will also be included.

All the important speleo events of 1964 will be scheduled, with dates, times and places.

There will be a complete list of all the Cave Rescue Headquarter in Britain, together with details of cave rescue procedure.

Amongst these major items, we will include details of the Caving Code, a Glossary of Terms and some simple First Aid Tips.

The publication will be 8½" x 5½" wide, it will contain over 100 pages - which will include a Day-by-Day DIARY which will have extra space for the weekend days, in which you can record your trips.

The cover will probably be of a pleasant blue leatherette finish, and the spine will be blocked in gold with the words:-

SPELEOLOGICAL YEARBOOK & DIARY 1964.'

The cost will probably be 7/6d. but will not exceed 10/--.

The venture is stated to be non-commercial in inspiration. Members interested in this project should please get in touch with Mr. Dryden at the above address.

NEW MEMBERS

We welcome the following new members to the Club:-

A.C. Coase, 53 Broughton Road, CROFT, Leicestershire.

M.G. Morse, 1 Walcot Rd., Swindon, Wilts.

G.J. Kendall, 23 Peakhouse Rd., Great Barr, Birmingham 22A.

and returning to the fold we are glad to see Brenig Williams and D.W. Smith. Caerleon, The Walk, Merthyr Tydfil and 75 Gooding Avenue, Leicester resp.

CHANGES OF ADDRESS

Penelope Tutt, Students Union, Dumfries Place, Cardiff.
Mr. and Mrs. J. Bevan, 62 The Greenway, Sutton Coldfield, Warcs.
Peter Rossiter, 65A. Basingbourne Road, FLEET, Hants.
Mike Duerden, Joy Cottage, Upper Poppleton, York.
Mr. and Mrs. S. Phillips, Bolam Hall, Whalton, Morpeth, Northumberland.
Rhidian Roberts, 26 Wheatley Place, Cefn Forest, Blackwood.
William Hughes, 18 Gordon Road, Roath, Cardiff.
Neil Jones, 4 Heol-y-Felin, Rhwbina, Cardiff.
Roy Kemp, 11 Church Lane, Southwick, Brighton.

OGOF FFYNNON DDU LEADERS LIST 1963/64.

Aslett, E. T.B. Clinic, Courtland Terrace, Merthyr Tydfil.
Andrews, T. 135, Danson Road, Bexley, Kent.
Ashwell, A. Stanyeld Road, Trevor Hill, Church Stretton, Salop.
Baglin, C. 8 Archer Road, Penarth, Glamorganshire.
Ball, K. 'Bronderi', Peniel Green, Llansamlet, Swansea.
Baynton, R. 15 Weig Gardens, Cendros, Swansea.
Bevan, J. 62, The Greenway, Sutton Coldfield, Worcs.
Birchenough, W. Coedmor Farm, Cardigan, Cardiganshire.
Clarke, W. 6 Glynderwen Crescent, Derwen-Fawr, Sketty, Swansea.
Clissold, G. Silhouette Cottage, Staunton, Nr. Coleford, Glos.
Cons, D. 'Haffes,' 16 Great Elms, Hadlow, Tonbridge, Kent.
Coombs, D. 'Brynawelan', Banwen Road, Glybneath, Glam.
Davies, T. 40 Crompton Road, Handsworth, Birmingham 20.
Deurdon, M. Joy Cottage, Upper Poppleton, Yorks.
Dilly, N. 3 Balaclava Road, Bermondsey, S.E.1.
Dryden, J. 1 Beaufort East, London Road, Bath, Somerset.
Evans, G. 25 Wren Road, Sidcup, Kent.
Fenn, B. 113 Sherwood Road, Hall Green, Birmingham 28.
Galpin, L. 6 Trinity Rise, Tillington, Stafford.
Galpin, M. " " "
George, C. Leys Cottage, Llanblethian, Cowbridge, Glam.
de Graaf, B. Neuadd, Llangorse, Brecon.
Grohman, T. 15, Bourne Close, Kings Heath, Birmingham 14.
Harris, W. Glen View, 17 Ford Road, Velindre, Port Talbot
Hartwell, J. Park Cottages, Nutfield, Surrey.
Harvey, J. 4 De-Breos Street, Brynmill, Swansea.
Harvey, P.I.W. at present abroad.
Harwood, E. 33 Worcester Road, Droitwich, Worcs.
Hawes, L. Cribarth, Court Moor Avenue, Fleet, Hants.
Hirons, M. 60, Neville Road, Erdington, Birmingham 23.
Homes, I. Upleadon, Trumpet, Nr. Ledbury, Herefordshire.
Hughes, W. 18 Gordon Road, Roath, Cardiff.
Hunt, D. 19 Daniel Street, Cadoxton, Barry, Glam.
Inson, E. 19 White Barn Road, Llanishen, Cardiff.
Jenkins, D., Dinmore, Dyffryn Road, Llandrindod Wells, Rads.
Jones, A. Victoria House, High Street, Glynneath, Glamorganshire.
Jones, C. 27 South Road, Sully, Glamorganshire.

Jones, D. 159 Kings Road, Canton, Cardiff.
Jones, N. 4, Heol-y-Felin, Rhwbina, Cardiff.
Jefferson, G.T. 6 Rhwbina Hill, Rhwbina, Cardiff.
Kemp, D. 5 Church Lane, Southwick, Brighton, Sussex.
Little, W. 29 Wrekin Road, Sutton Coldfield, Warcs.
Lloyd, H. 62 Broniestyn Terrace, Trecynon, Aberdare.
Lloyd, O.C. Withey House, Withey Close West, Bristol 9.
Morgan, R. 51 Malvern Terrace, Brynmill, Swansea.
Osbourne, J. 34 Haygate Road, Wellington, Shropshire.
Phillips, S. Bolan Hall, Whalton, Morpeth, Northumberland.
Platt, J. Flat 2, 4 The Drive, Hunton Hill, Erdington, Birmingham 23.
Railton, L. 12 Chester Road North, Sutton Coldfield, Warcs.
Roberts, R.D. 26 Wheatley Place, Cefn Forest, Blackwood, Mon.
Round, T. 250 Henwood Road, Tettenhall, Wolverhampton, Staffs.
Saunders, G. 44 Down Street Clydach, Swansea.
Skinner, M. 11 Three Arches Avenue, Llanishen, Cardiff.
Smith, R. Ashleigh, 2 Cambridge Road, Fulbourn, Cambridge.
Stephens, A. 65 Dan-yr-Graig, Pant Mawr, Cardiff.
Squires, J. 3 Swanborough Corner, Highworth, Wilts.
Thomas, G. 'Greenfield', Heol Sarn, Llantrisant, Glam.
Thomas, G.O. 6 Villiers Road, Ammanford, Carms.
Williams, A. Botany Dept., University College, Cardiff.
Williams, R. 107 Plymouth Road, Penarth, Glam.
Woodford, T. 6 Hurst Park Avenue, Cambridge.
Woods, B. 27 Foxley Lane, Purley, Surrey.
Lloyd, N. Barlands Cottage, Bishopston, Swansea, Glam.

7. FOR THE RECORDS.

If you are not interested in the future of the Club, don't read this; if you are, read it twice - one eye at a time if necessary. Records mean different things to different people. For some, it is a long list, with the fastest pint drinker at the top, or the deepest cave in the world. Records of caves, lists of caves, dates, lists as long as (here insert the name of the longest cave) But in all things, records are of the past, bricks of yesterday, tidy piles of things logically going from one thing to another. History. The Club's. For the Record Officer it is all things, the composite pattern which in the future will be called The South Wales Caving Club.

Since taking them over, my first job has been to go through the Library. David's lists have been a great help and emphasised what I should have known if I had read them properly - that there are many gaps in them - missing numbers of journals and newsletters. We have very few complete runs of publications. It is one purpose of this note to draw everyone's attention to them - the things that are missing - and to appeal (again) to anyone who can help fill the gaps by gifts, bequests and even offers for sale. A list will be found at the back of this article. We want those especially, but I would be grateful for any journal or newsletter even if it will duplicate those in the Library - two tarts are better than one - a proverb attributed to Rubens I believe.

After 17 years, I feel that our library should be much better than it is - it does not appear to have grown and expanded much with the actual growth of the club. No-one can be blamed for this, perhaps the club has as a whole been so occupied, so fixed in its attention to cave exploration and cave detection, that it has forgotten that books and records actually exist. The whole should grow together; the finding of new caves need more books and references to compare and describe them. As far as posterity is concerned, Ogof Ffynnon Ddu will not exist without Harvey and Nixon's note to the Record Officer and Lewis Railton's survey. We can talk about it as much as we like, the fact is that Railton's survey will last longer than the echoes of streaming water and scraping of boots. Without the record, the survey, all will be wasted time. Why do I say all this? Mainly because at the moment, there is no copy in the records of Lewis' survey of O.F.D. and as far as C.R.G. is concerned, it is out of print. Where it has gone I don't know, but as far as the records are concerned Railton never surveyed it. Of course, I am appealing for anyone with a spare copy or one which they no longer require, to donate it to the Library.

We should be grateful to David for binding our copies of the C.R.G. Newsletters and transactions into book form - this has helped to preserve them intact. Even our own Newsletters have suffered losses, since three were missing. Through the generosity of some of our members these have been replaced. It is proposed that we bind these into volumes and so it is hoped, preserve them. Away from our immediate surroundings we have not been so fortunate. We should have Volumes 14 to 37 of the British Caver. We have only 29 to 37. The publisher has no spare copies for sale, so unless I can beg borrow or steal back numbers this loss will remain a very large black ogof in our collection. Four copies have been donated already so I have some hope. We have no copies of the Journal of the Mendip Exploration Society - the fountain head from which we sprung. Any offers?

A gift from the Chelsea Club has made it possible to complete our run of that society's publications. This has not been possible with the Wessex Club journal and we still have eleven recent numbers missing as well as many early news-sheets between 1947 and 1950. That splendid Bulletin of the Bristol University Speleo Club has also suffered but negotiations in progress may enable us to complete our run. I could go on all day. Please read David's lists and search your friends libraries as well as your own for the missing publications. If we get more than one copy it doesn't matter, since we can start a second collection.

Books:- we have few books in our Library, non-fiction or otherwise, very few technical books or geological journals. No comment. Help!

Surveys:- with the exception of the C.R.G. Surveys there are only two copies of Grade IV surveys in the records. The other surveys are small versions with no grading given. There is room for improvement and it is hoped that more effort will be put into this aspect of our work in future and that all completed surveys will find their way into the records. It may be forgiven me if I make a few remarks about surveys, even though I know little of the technical details. In the first place - what are surveys for? We are not all bats and therefore they obviously have a practical purpose in that they lead us in and out of caves, but this is not their only function. Surveys should be able to tell us a lot about the history and formation of caves, as Glennies' work in O.F.D. has shown. They should provide information and clues for further exploration and provide a basis for any future scientific work whether it be biological, archaeological or any other discipline. How, therefore, do our present surveys stand up to this sort of examination - especially those in the records? They seem adequate for the first job - one should be able to get in and out alright without much danger. It is when one turns to them for their other uses that one wonders if these have been adequately covered. Our President made the pertinent remark at the last A.G.M. that few of the Welsh cave plans had the direction of water flow marked. How many have been studied to the extent that it is possible to mark the limestone beds in them on the plans and indeed, how many of them have section drawings and elevations - all vital to the cave historian. Any cave survey worth its salt should have a certain minimum of information on it. (I am grateful for much discussion with other members for these remarks). Surveys should have plans and elevations with a minimum of C.R.G. Grade IV with detail such as the limestone beds on them; the survey should have Radio Check survey carried out. Detailed cross-sections should show the numbering of beds, records of scalloping markings and floor deposits. With the survey there should be descriptions of floor deposits and samples of the same should be collected and preserved. Records of draughts of course, are a must. In the past there is little evidence of photographic records having been kept at the time of cave discoveries. Since things get broken and destroyed, photographs, to my mind, are of great importance. I am also sure that plenty of early photographs exist of the earlier discoveries - where are they now? Any offers? I can imagine the mile upon mile of reels of film that have been taken in caves. Few are in the Records, indeed, to date - one. This is a shame and a pity, since, for some places photographs are the only records, the only thing fossilized for the future, the cave having long ago disappeared, the bones blown away in the dust.

Cannot we catch them now, before it is too late? Already in Tooth Cave many of the curtains have been broken by vandals. There were few photographs. American spelunkers have done photographic surveys of caves and shown that chambers that were once a forest of calcium are now bare and denuded. We should have a record - it was good to see Cwm-dwr Jama well trapped on film recently; it'll be of interest to re-do it in ten years time. Obviously one doesn't want photographs for their own sake, but rather a collection from each cave illustrating its chief points and attractions. Records for the record officer are things for the future, never for today. What will speleo 1980 want? A recent appeal for the loan of negatives brought one response; forty negatives of cave entrances some now destroyed. I don't believe these are the only ones around; have you any? Incidentally five members recently spent a whole day looking for the lost entrance of Whiskers Cave. A photograph would have helped

Back to Books. People go abroad and get lost, struggle with foreign cavers, face danger from foreign food; some return. It has been suggested to me that those who do come back might find it possible to buy books and further, remember the club when they do so and donate a guide book or so, or some other book on caving. This would help all those who go after them. Without such paper contacts, how can we judge the wealth of the continent, the degree and quality of their subterranean black voids. People bring back things for their Aunties, why not something for the records.

There is perhaps another aspect of records that has been neglected - diaries and logbooks of past and present members. Does anyone but Peter Harvey and Ian Nixon remember that day, the time, the weather when the O.F.D. void opened? Who cares? you say, O.F.D. exists. Perhaps, but the record is not complete. Someone, someday, will want to know, will want to write, say, 'A History of Cave Exploration in South Wales'. He will want to know. All such things are human, our actions unfortunately are also human; all should be recorded. What X really thought about Y when we found the dig was no good; why the names for certain passages, certain pools and avens. Let's have it all, complete, rounded, the whole story. The log book in the club is for this purpose, indeed, earlier volumes tell revealing stories - "Ffynon games in Ffynon Ddu", said someone in the 1950's. Is it too much to ask for the leader of any dig or project to write a few lines each weekend in the Logbook - in the Records. It will then be complete. We don't want much clever stuff - the facts first and foremost of the trip, the negative altitude gained or lost, a few personal comments about the trip for instance. Distances should still be measured in feet not miles.

Derrick Webley.



WANTED - ANY OF THE FOLLOWING BACK NUMBERS.

1. British Cavers - Volumes 1-16, 18-24, 27, 28, 32.
2. Craven Pothole Club Journal - Vol.1 No.5 - 1953.
3. Proc.U.B.S.S. Vol.6 No's. 2 and 3. Vol.7 No's 2 and 3.
4. Cave Research Group Occasional Publication - Lewis Railton's Survey of O.F.D.
5. Wessex Cave Club. Journals No's. 7-21,55,57,59,60, 61,63,67.
6. South Wales Caving Club Newsletters - any spare copies of old unwanted issues will be welcomed - please!
7. AND ANY BOOK, PAPER OR JOURNAL YOU THINK WOULD BE USEFUL IN THE RECORDS AND WHICH WILL HELP OTHER CAVERS.

LIBRARY LIST NO.5. AUGUST 1963.

JOURNALS AND NEWSLETTERS.

1. Axbridge Caving Group. Newsletters. April, May, June, July 1963.
2. Wessex Cave Club. Journals No's. 87, 88, 89, 90. From Nov.62 - June 63.
3. Proc. U.B.S.S. (1961 - 62) Vol.9 part 3. This Number contains amongst other things, an article on the Solution of Limestone and an account of the Irish caves explored by the Society - incidently these articles can be purchased seperately from the Society for those interested.
4. Cave and Crag Newsletters 1962 No.4. and 1963 No's. 1. and 2.
5. South Wales Caving Club. Newsletters No.43 and 44.
6. British Nylon Spinners. Cutting s from 'Signpost' to date.
7. N.S.S. News. Vol.20. No's. 9,10, 11, 12. Vol.21. No's. 1,2,3,4,5 and 6.
8. Hereford Caving Club. No's. 14 and 15. The club also possesses a copy of their first journal to complete the set to date.
9. Chelsea Spel. Soc. Vol.5. No's.3,4,5,6,7,8,9 an appeal to the Secretary of this Society for two back numbers was successful, so with the two missing from the year 1960 now present, we have a complete run of this journal.
10. Th. Chelsea Club was an amalgam of the London Spelaeological Group plus the original Chelsea's, Our library now contains the proceedings of the London group - Volume 1. 1949 and Volume 2. 1950 and to complete our set we have purchased Volume 1. of the Records of this Group - published in Oct.1956.
11. Westminster Spel. Group. Bulletin Dec.1962. Jan/Feb. 1963. March '63 May '63.
12. British Caver. Volumes 37 and 38. As well as these new numbers we have been fortunate im having four other volumes given to us. Bill Harris has presented Volumes 17,26 and 28: while Mrs. Price has given to the Library Volume No.25. We are still short of early numbers - any more?
13. Cave Science. David Jenkins has presented Vol.1. and 2. to the club. We should be eternally grateful to him. At least 4" thick and full of Science.
14. Yorkshire Rambler's Club Journal. The following backnumbers have been purchased for the club. Vols. 7,20,22,24,25,26,27 and 28. All contain many cave records of all parts of the country and articles on climbing routes as well as many excellent photographs.
15. Craven Pothole Club Journal. We have been most fortunate that the Committee of this Club has presented us with a set of all the back-numbers they have left

Vol.1. parts 5 and 6. Vol.2. numbers 1,2,3,4. If someone has Vol.1. No.5 and is willing to donate it, it will make our sequence consecutive. Any hope?

16. Caving sponsored by the East Devon Cavers - we have two numbers so far, Winter 62 and Spring 63.
17. Westminster Spel. Group. Dec.62. Jan./Feb.63. March.'63. and May. 63.
18. 'Brycheiniog' Vol.5 1959. This volume contains the fascinating article by T.M. Thomas on the 'Geomorphology of Brecknock' It has been purchased.
19. Geological Magazine 1954. This has been purchased since it contains an article by T.M. Thomas on 'Solution Subsidence Outliers of Millstone Grit of the North Crop of the South Wales Coalfield' - all About Swallow Holes.
20. Geographical Journal 1954. This also contains an article on Swallets by Thomas - 'Swallow Holes on the Millstone Grit and Carboniferous Limestone of the S.Wales Coalfield'.
21. White Rose Pothole Club. 1962 Library list.
22. The Speleologist. Bill Clarke has presented two copies of this periodical to the Club. No.3. (1954) and Vol.2.No.1. (1957) Anyone else with any odd copies to add to the above?
23. The Northern Cavern and Mine Research Society. Vol.1. No.1 and 2 - an excellent Newsletter.
24. Geomorphological Abstracts. Numbers 1 to 12 i.e. to date - The Karst section only.
25. Dan-yr-Ogof. The Official Guide. Mr. Ashwell Price has presented a copy of this 'historic guide' to the Club.

The Wessex Club has presented us with four of their back issues but we still need nine to complete the run. John Squires has given us one of the backnumbers of the Proceedings of the U.B.S.S. that are missing and through the kindness of Charles Freeman, Noel Dilly and Clive and Arnold Jones we have been able to complete our collection of our own Newsletter.

BOOKS.

1. British Caving. 2nd. Edition. Ed. Cullingford. presented by Bill Clarke.
2. The Technique of Mountaineering. J.E.Wright. Presented by Clive and Arnold Jones.
3. The River Scenery at the Head of the Vale of Neath. F.J.North Presented by C. Jones.
4. The Evolution of the Bristol Channel. F.J. North. Purchased by the Club.
5. Mining for Metals in Wales. F.J. North. Purchased by the Club.
6. Bibliography and Index of Geology and Allied Sciences. D.Bassett. Purchased by Club.
7. Caves of Adventure. H.Tazieff. Presented by D.P.W.
8. The Descent of Pierre Saint-Martin. N. Casteret. Presented by D.P.W.
9. The Cave of Rouffignac. Nougier and Robert. Presented by D.P.W.
10. The Cave of Postojna and other Marvels of the Karst. Serko. Presented by D.P.W.