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EDITORIAL

A new Volume, a new Year, and a new Editor. To take these three points in reverse order, firstly the Club's thanks go to Phil and Paul who as temporary joint Editors put much effort into the last two Journals.

Next regarding 1978, last year saw some fine cave exploration on Mendip and hopefully this year will have its successes as well, whether with the lucky find, by pushing a bit further than anyone before, or through the long term dig, where so much toil makes the reward more precious.

Finally, Volume 14 is complete and an index to it will be included separately with a future journal, so that Volume and index can be kept together. Members who have their Volumes bound may wish to wait until completion of Volume 15 and bind the two together. The light-weight format of recent and future Journals will make this a practical and economical proposition.

CLUB NEWS

Subscriptions

Enclosed with this journal is a list of those members who have still not paid their subscriptions. In accordance with the rule change made at the 1977 AGM, any member who has not paid within one month after the date of posting of this journal will receive a letter informing him or her that the membership has been terminated. This move is in order to economise on posting journals to members who are behind with their subs, and will also enable the Treasurer to deal more easily with subscription monies. There will be an extra period of grace for overseas members.

Upper Pitts Progress

At the time of writing, Messrs. Popes of Wells were well under way in rendering the outside surfaces of the extension. Sliding gear is on order for the main door, and it is hoped to begin work on fitting this building out as a workshop in the near future. This will release the present workshop for use as an extra changing room, with an enlarged tackle cupboard and another shower.

It has proved impossible to fit Yale locks to the doors, and new Unions are to be fitted, with the same key for all outside doors and for the new tackle cupboard. Since keys cost approximately 75p to cut, a deposit of £1 will be required. Will members who require a key to Upper Pitts please apply as soon as possible to the Hut Warden, c/o Upper Pitts.

Members are reminded that at the next Committee Meeting (March 5th) any food box which is not marked with the owners name or paid for will be taken from the kitchen. Similarly, unpaid-for, un-named lockers will be opened and reallocated.

The recent decision to ban all animals from Upper Pitts has been modified. Members who bring animals to the HQ are requested to keep them out of the kitchen, and under control at all times. If animals cause nuisance to any members, they are liable to be banned completely.

It is intended to hold regular bimonthly working weekends throughout the year, alternating with Committee meetings. These weekends will not be available for booking by visitors, and members are encouraged to come up and lend a hand to the few regular workers. Every little helps, and there is always time for plenty of caving and drinking as well as painting, concreting and maintenance.

Photographic Competition

Entries for this competition have so far been disappointing, and a closing date of April 29th has been fixed. If there are insufficient entries, these will be returned, and the event abandoned. It is hoped, however, that the prizes, which will be to the value of £10 plus entry fee money, will stimulate more entries. Judging and prize-giving will probably be made at a film evening, possibly at the Hunters.

Club Expedition

In view of the lack of interest, there will be no organised expedition in 1978. Phil Henty will be taking a 'tourist' type holiday in the Picos in June, however, and if any member is interested in a few weeks easy caving, walking, swimming and sunbathing, they are welcome to contact him for further details.

B.C.R.A. Symposium on Northern Spain

The date for this event has been fixed for June 10th, at Bristol University. Further details will be announced later.

Lamb Leer Access

A rental of £100 has been agreed between Southern Caving Clubs Ltd., and Somerset County Council, for a three-year period. Access arrangements for Club members and their guests remains unchanged.

Address Correction

Amendment to the membership list published in the last Journal:
Mr. & Mrs. R. A. E. Scammell, Clematis Cottage, High Street, Bathford, Bath BA1 7TJ.

New Members

We welcome the following new members, elected on January 8th:

- Ms. Dianne Beeching, 8 Seymour Close, Wells, Somerset BA5 2JD.
- David A. Berrill, 10 Dunsters Road, Claversham, Avon. (re-elected).
- Colin J. Binnie, 12 Elm Close, Wells, Somerset.
- Steven K. Inglis, Cleeve House, Church Street, Cheddar, Somerset.
- Edward Symons, 37 Charleston Street, London SE17 1NG.
- Michael F. and Maureen Wheadon, 91 The Oval, Bath, Avon.
- Ms Mandy A. Wickenden, 5 Rachels Way, Bois Moor Estate, Chesham, Bucks. HP5 1SZ.
- Ms Lynne A. Williams, Whitestown Farm, Cheddar Crossroads, West Harptree, Nr. Bristol.

LETTERS TO THE EDITOR

January 11th, 1978

Dear Editor,

In recent weeks, there has been some misunderstanding over some of the actions and attitudes of the Committee; although this has now been amicably resolved, it was suggested that a letter be written to the Journal explaining our philosophy on various topics. Hence this letter, which has been seen and approved by the Committee.

It may help to begin by describing the current state of the Wessex Cave Club. We have almost 300 members, spread throughout the world, but centred mainly in the Mendip region, with concentrations in South Wales, London and the Home Counties. We also have two affiliated clubs, and are likely to have more. Many of our members belong to other clubs, and we are well represented on various caving bodies, both political and scientific. Traditionally, our home base has been Mendip, and to this end we have built and maintain a headquarters at Priddy, the size and luxuriousness of which serves to reflect our size and the enthusiasm of our members.

It is not surprising that the size of the Wessex means that several caving 'cliques' have arisen to suit the capabilities, responsibilities and location of individuals. I may cite as examples the Friday Nighters, the Black Maggots, the London Underground and odd digging factions. People from the Wessex and other clubs join in with these activities as the mood suits them. Our biggest problem is communication, and a bimonthly Journal, even if published regularly, cannot overcome this. The Upper Pitts notice board usually carries a lot of relevant club news, while for many, Hunter's gossip suffices. The communication gap was brought home to us when it became apparent that to many members, the Committee is only a set of names. In my six or so years as a member, over three of which have been as a Committee officer, I doubt that I have met half of our members - and can remember even less! Yet communication must be two-way and my personal belief is that members should be prepared to give to the Wessex, in terms of journal contributions, help at Upper Pitts working weekends, tackle building, or even organising or joining in activities, not to mention serving on the Committee, as well as take from the Club by using tackle, receiving the Journal, and using the HQ as a convenient and cheap weekend retreat. It is not a perfect world, and few of us believe that those who do give to the Wessex are purely altruistic in their motives - but we are grateful nonetheless.

It is pertinent to refer to a few of the Committee's recent decisions, to show how we believe we are acting for the good of the Club as a whole. Firstly, Upper Pitts. The HQ became regularly and grossly overcrowded a year ago, and, following complaints by members, we limited the size of guest parties. Abuse of the facilities still continues, and, while we like to encourage visiting clubs, our clear duty is to defend our members interests first. Hence the 3-tier hut fee and tighter booking system. At present, the number of bunks is adequately matched by the availability of cooking, washing, lounge and changing facilities. Allowing for the varying number of members who stay at Upper Pitts, and who may bring personal guests with them, visiting parties can be, and are, accommodated. By abolishing 'day fees' we hope to discourage campers who sleep in adjoining fields, but use all our other facilities. They are a serious cause of congestion. Similarly, parties turning up to stay 'on spec' are being discouraged; it is not fair to those who do book, and a large number of visitors from more than one club multiplies the chaos, and makes members feel like strangers in their own HQ. Members who do not stay regularly at Upper Pitts would be surprised at the lack of consideration shown to our "guests". Of course, the rules we make are as flexible as circumstances allow, but we are not alone in our attitude towards 'cowboy' clubs - one club has gone to the lengths of refusing *all* bookings from educational establishments.

Security is a perpetual problem for us, our headquarters and contents (excluding personal kit) is worth several thousands of pounds. Thefts have taken place at Upper Pitts, as at other caving huts, and one worthwhile measure will be to change the door locks, since the present lock has been in existence for so long that the Committee no longer knows who holds keys. Members will

easily be able to obtain a key to the new lock, but may I remind you that the HQ should *never* be left unlocked while unattended. All external doors except the main extension door will have the same lock.

Tackle security is a different matter. Since all ladder has been kept locked up, losses have virtually ceased, and are usually only the result of a delay in returning it after a trip. Our ladder is being identified with red epoxy resin and anodised rungs to discourage theft or accidental exchange. We accept the inconvenience of having to find a Committee member to issue tackle, particularly for midweek trips, and soon the hut key will also fit the tackle cupboard lock. The booking system will remain.

Long before I joined the Wessex, the Club had a reputation for being difficult to get into. This reputation is no longer justified, but the Committee currently feels it is desirable that prospective members should have caved with a member, and be proposed or seconded by at least one established member. These 'qualifications' are not difficult to achieve, and we make no stipulations at all as to the caving experience or ability of candidates. Yet it is surprising how many would-be members are sent a helpful letter and prospectus, and are never heard of again. We suspect many such people of seeking to join the Club simply to get cheap accommodation on Mendip, easy access to tackle, and a 'cheap' journal. The current application procedure seems to work very well, and so we see no need to change it. Once the application form is properly completed and the subscription paid, election is usually automatic. New members are sent a copy of the prospectus (currently being revised) but the best way of getting to know the Club is to meet other members, and cave with them. To this end, Upper Pitts is a convenient meeting place, and should be recognised as the Headquarters of our Club, even if for various reasons not all members can visit it or stay there. A visit to Upper Pitts during any weekend will usually reveal several members, and at least a few Committee officers.

In conclusion, the Committee hopes it is serving the needs and wishes of the Club as a whole. At the last AGM, Frank Frost and Richard Kenney commented on the complexity of the organisation and running of a Club such as ours, and it is only natural that there are occasional grievances and disputes. Rather than let these go unnoticed, please tell us when they occur, and we will do our best to rectify the fault. You may not be able to meet us personally, but letters or Journal correspondence always receive due consideration. If your feelings are that strong, why not stand for election to the Committee?

Phil Hendy, Hon. Sec.

Dear Sir,

May I be permitted to write a few words about the "Friday Night" Saturday trips to Wales. As you probably know, the "Friday Night" trips that are run every fortnight are open to members of all Clubs, and despite our incredible differences we manage to cave quite happily as a group. We also run about three or four trips a year to South Wales, these of course being on a Saturday.

The general system is that by mutual consent we fix the dates for a year in advance. As a Welsh date approaches so people state their preferences and we select the cave. Each cave has its own access rules and for clarity I will consider Ogof Ffynnon Ddu only.

Approximately one month in advance one has to write to the Nature Conservancy Council, John Harvey, Clifford House, High Street, Newnham, Glos. GL14 1BB Newnham 376 for a permit to enter the cave. One should state whether or not this is for OFD1, OFD2 or Cwm Dwr. Each permit allows the leader to take six other cavers in the party.

Do avoid the 1st Saturday in the month as Penwyllt (South Wales Caving Club HQ) reserve their premises for Club members only on those dates.

I have never found it necessary to advise SWCC of our coming, but I always ensure that the Duty Warden is found, the nature of our visit explained, who we are, and a whip-round of say 5p or 10p each made to cover the use of their dining room, toilets etc. The showers cost an extra 10p per person. It is essential that we make these gestures for we all use and appreciate their facilities.

As the trip date approaches so people wishing to come contact me or other regular "Friday Nighters" and their names and locations are added to the list. At this stage of the game we must consider the permit system, 1 leader + 6, and usually we can con enough Mendip OFD1 leaders or SWCC leaders to cover the size of the party. (One only needs OFD1 leaders to pass through that part of the cave and this is a landowners request.) However, if this is not possible then we have to work on a first come first served system. We pool our transport and this can involve a fair degree of planning and money on phone calls.

At long last we are over there, fed, and ready to go. The permits are exchanged via the Duty Warden for a key, EVERY party member's name is put in the HQ guest box together with the Club name and cave key number. There is also a notice-board made out for 24 hours, and all names are entered on cards against the expected 'out time'. I usually add on two hours for contingencies. Make no mistake about it, if you are overdue then a search will be organised and at the least you would keep someone away from the pub on standby. Remember that this cave has at least 25 miles of passages so the access arrangements have to be fairly rigid.

You may well ask, "What are the benefits of a trip like this?" Well, the regulars amongst us enjoy caving as a group, so that's one answer. Another is that we give anyone the chance to learn the basic routes so that they can then run their own trips. The last one is that as an OFD1 leader I must give people the opportunity of visiting that part of the cave.

On Saturday November 12th we had 18 in the party. This is quite normal these days but it does mean that we have to be very conscious of our group responsibilities. As happened on that occasion one must be ready to change the route if someone finds the 6 or 7 hour trip too tiring (often done by us without them necessarily being aware of the fact).

Unfortunately, on that date four people joined our party and I knew nothing about them until they overtook me in OFD2. They failed to wait at an agreed place and we had occasional news of them from parties travelling in the opposite direction. We had to change our plans and surface via Cwm Dwr instead of OFD 1 and they were left on their own and had to return by their original route. Had we stuck to our original plan of entering via OFD1 I would NOT have let them enter the cave, for our leader ratio would have been invalid.

In conclusion may I stress that we WANT to help anyone interested but common courtesy also helps us.

Yours faithfully,
R. R. Kenney.

Dear Sir,

I don't think the author of your article on "A Mushroom with a View" is right (ref. W.C.C. Jour., 1977, No. 170, Vol. 14, p. 165). I doubt very much if the species he has found is *Coprinus radians*. I have two reasons. One is that, if he only has the mycelium and a stalk to go on, it might be anything. It is essential to have the complete fructification. The other is that I had the opportunity over twenty years ago of studying a specimen of *Coprinus domesticus* which was growing from an old sack at the Priddy Green Stream dig. W.I.S. will remember that. The mycelium spread from the sack all over the neighbouring walls for a radius of several feet. It was white, dripping with moisture and very beautiful. There is a colour photograph of it taken by A. J. Morrison in about 1956. The next year it fructified and little clusters of toadstools appeared all around the edge of the mycelium on the wall of the cave. I was unable to get a photograph but I took some out for identification. Most of the specimen fell to bits (it is possible that not many members of the Wessex have experienced at first hand the difficulty of getting specimens of fungi out of caves) but there was enough there for identification. I think it very likely that the fungus described by your correspondent is of the same species. After fructifying the Priddy Green Stream fungus died. I hope that your correspondent (what a nuisance anonymity is; it would be so much easier to call him "Dave") succeeds in finding the fructification but he will know of course, that it only lasts for a few days in this genus. I think if he were to visit the Sidcot Dig once a week for the next year or so, he would stand a very good chance of not missing any fructification that took place.

Yours,
Oliver C. Lloyd.

Dear Sir,

A number of members who read both the Wessex Journal and the BCRA Transactions may well have been surprised to read an apparent duplication of Paul Ramsden's article on S.R.T., by myself. I should like to point out that no such duplication was intended and the articles are the result of totally independent efforts on the part of both authors.

I was particularly interest in the area of Mr. Ramsden's article dealing with rescue on a single rope by another rescuer on the same rope. In other words, specifically those areas into which I and other members of the Club have done a great deal of practical research.

To be blunt, using the Techniques and Methods described (BCRA Trans. Vol.4 No.3 August 1977. p.383 Figs. 14 and 15) it was not found possible for a single rescuer to effectively lift the casualty. In practice the losses incurred when ropes ran over karabiners as illustrated were too great to be offset, except in the case of an exceptionally large and strong rescuer and a very light casualty.

The same arguments applied even when pulleys were substituted for the karabiners, and neither system was found to be viable in ideal workshop conditions let alone in those of a cave.

I would advise anyone who intends or who may have to employ these techniques, to try them out and assess their limitations, with respect to their own personal rigs and abilities, in an environment other than that of a cave.

Yours faithfully,
The Mendip Mushroom

YORKSHIRE MEETS

Pots booked during the next few months are:

February 26th	Penyghent Pot
March 26th	Dale Head Pot
April 30th	Gingling Hole

For further details contact the Caving Secretary or the Hut Warden (addresses inside front cover).

AROUND THE DIGS

by Ear t'Ground

Since nothing spurs diggers on more than the chance to make the 'Caves of Mendip' out of date, it is not surprising that there had been a flurry of discoveries on Mendip in recent months. During November 1977 Swildon's Hole temporarily dropped its defences with breakthroughs at two long standing digs, the Sidcot dig in South East Inlets, and Heaven and Hell in North West Stream Passage.

Pete Moody's and Alison Hooper's success came in digging up through the U-tube at the end of Sidcot Passage, notorious for its lack of oxygen and asphyxiating CO₂ concentrations. The breaking of a final vertical section of 17ft. entered a roomy rift via the floor. A draught now invades the U-tube to disappear up an aven 300 ft of walking type passage further on, as well as at the final chamber, in a further continuation entered after a choke was dug and banged. The extension, Renaissance Passage, has several offshoots and is a respectable 520ft plus in length. Surprisingly, the new passage heads north towards Barnes' Loop, and there is only 200ft of limestone to go before the streamway is intercepted. Work continues to find out how this passage ties up with the cave's sequence of development.

Not to be outdone, the B.E.C.'s Wigmore Swallet dig yielded to concerted effort, and produced an unstable boulder chamber, with a cherty climb down to a bedding plane, which is draughting and being avidly attacked at every available opportunity. A notable characteristic is the pretty red mud which pervades the place.

Meanwhile the B.E.C. and Grampian have started to dig a new shaft into Tynning's Barrows Cave after the collapse of the original entrance. It is hoped to make a connection with Dragon Chamber or associated high level passages.

Over on Eastern Mendip, Al Mills has been instrumental in a second confirmatory radio-location of the aven in Stoke IV, with the intention of digging an entrance to this well-decorated part of the cave, and facilitating further downstream diving. The transmission enabled the surface team to pinpoint the aven, which rises offset from the streamway, as lying below a shallow depression in the field above, and there are prospects of a magnificent free-hanging 100' entrance pitch to the cave in the near future.

Enthusiasm for the downstream sump in Mangle Hole seems to be inversely proportional to its length, but at 200' plus, this is not to be wondered at. Further news is expected soon from the subaqua section of the Black Maggot Caving Group.

Finally, Crystal Passage in Swildon's II was pushed recently to re-enter the streamway at high level. Perhaps the authors of the 'Complete Caves of Mendip' should consider publishing a loose-leaf edition, and selling regular updates!

CAVE LEADERS

The following is a list of approved Wessex Leaders for various caves. If any member wishes a trip, would they contact the Caving Secretary (address inside front cover). If any details are incorrect, please inform the Hon. Sec.

St Cuthbert's Swallet: - P.L. Hadfield, B.E. Prewer, N.P. Taylor, M.F. Wheadon.

Shatter Cave: - W.J. Ham, A.D. Newport, P.A.K. Palfree.

Ogof Ffynnon Ddu I: - I. Jepson, J.H. Jones, R.R. Kenney, M.R. O'Connor, R.A. Philpott, C. Pickstone, D.M.M. Thomsson.

Dan-yr-Ogof: - I. Jepson, T.E. Reynolds, R. Staynings, R.A. Websell.

FRIDAY NIGHT TRIPS

Trips for the next few months are as follows:

March 3rd	Thrupe Lane Swallet	April 14th	Cow Hole
March 17th	Wales	April 28th	Lionel's Hole
March 31st	Singing River Mine		

Meet at 7.00p.m. except for Wales.

Further details from: R.R. Kenney, 'Yennek', St Mary's Road, Meare, Glastonbury, Somerset BA6 9SS. Tel: Meare Heath 296

NEWS FROM OTHER REGIONS

WALES

Agen Allwedd The cave management committee ask that readers attention is brought to the following points:

- a) Carbide is being dumped indiscriminately in the cave. It should only be used as a secondary source of lighting in an emergency.
- b) The full name of the club/organisation visiting the cave must be written in the logbook, not just the initials. (There are many C.C.C.s!)
- c) The destination of the party in the cave must also be written in the logbook.
- d) Parties are advised to abide by the recommended code of practise of having a minimum of four in the party (a party of one has been reported!).

A dry route has been opened up, by-passing the first sump in Turkey Stream Passage, by Chelsea S.S. There are hopes of a similar high level by-pass to the second sump.

O.F.D.II Carbide dumping is causing a problem here, too, and the SWCC ask that the primary lighting source is electric. Parties should be a maximum of six in number. The key may now be obtained from Miss Denise Samuel, 4 Brent Court, Hanwell, London W7 3BZ.

Otter Hole. When booking this cave, please enclose a £2 deposit plus two stamped self-addressed envelopes, one for the key and the other for the return of the deposit. Information on the cave and the state of the tides is also available from John Court, Trenchard Cottage, Joyford, Coleford, Glos. The cave has been gated near the entrance to comply with the landowner's wishes, and to prevent casual access by the public.

Damage to the cave has already destroyed some formations, while tape left near the entrance for onward transmission has been unravelled, and rendered unusable. Remember that the water in this cave is heavily polluted and unsuitable for drinking. You are advised to take your own liquid refreshment down with you.

Nant Glais Valley Caves After meetings with the manager of Vaynor Quarry, an alternative access route is being arranged, to avoid using the farm.

DERBYSHIRE

Hazelbridge Cave. Access to this cave is being allowed on a trial basis. The entrance is gated and locked, and applications should be made to Ron Murphy, 35 Logan Street, Market Harborough, Leics. Numbers are limited at the request of the farmer.

Clayton Adit. There is no access via the Roadside Entrance, and there is not a key at the Black Lion, Butterton. Negotiations are under way to try to secure access through insurance. Access is still available via Chadwick Shaft.

Beeston Tor Caves. Seek permission (freely given) from the farmer (Mr. Pritchard). The riverbed must not be used as a right of way, but all public rights of way are signposted.

Millclose Mine and Yatestooop South. Access now forbidden because of alleged dangerous smelter fumes.

Hillocks Mine No access restrictions - do not ask for permission. Park carefully, and do not obstruct lanes or gateways, change in the barn, wash in cattle troughs or leave litter.

WILTSHIRE

Box Mine. Bob Scammell reports that the entrance in Hazelbury Quarry on the opposite side of the road to Back Door is rapidly disappearing under thousands of tons of quarry waste and slurry. Some of this appears very liquid and entry or exit over it after dark could become somewhat dicey.

Once this entrance is covered the only remaining entrances will be Back Door, Lady Hamilton's II and Jack's Workings.

FOREIGN EXPEDITIONS

John Middleton, the Foreign Secretary of B.C.R.A. would like to have a two-way exchange of information on foreign expeditions, which will be of benefit to those going abroad, and help to prevent duplication of serious work, save hours of research, provide knowledgeable contact in a foreign region, and provide interesting statistics on expeditions. So please get in touch with him before you go, and send a report on your return, in order to help him and others. His address is 161 Dobbin Hill, Sheffield 11. (No doubt it will also help to know who is in the area in the event of a rescue - *PGH.*)

MANGLE - SO FAR

Rob Harper

Once upon a time (Thursday 20/10/77), Rich Websell and myself were sitting in Upper Pitts trying to decide where to go for an evening's caving. A perusal of the guidebook later, we decided to go and take a look at the deep pools which it mentions in Mangle Hole's Aldermaston Chamber.

Acting on Rich's assurance that as he had been there several years before he could find the cave, we set off fully laden with wet-suits, diving gear, bottles, ropes, ladders, etc. After an hour and a half of floundering through Sandford Woods in the pitch dark falling into old mine workings, bramble bushes and other impediments of the western Mendip countryside we were both thoroughly pissed-off, so we pushed off to my flat in Weston for a much needed bath and drink.

On the following Sunday Rich located the entrance in daylight, thus confirming a suspicion of mine that we had been nowhere near it on the previous Thursday, and he also cached the tackle in a nearby depression ready for the next trip.

On Tuesday the 25th we actually got down the cave, accompanied by Jeff Price and Chris Milne. Everything went smoothly until we got to the squeeze into Aldermaston Chamber (known as "Chapman's Pincher") when, much to everyone's amusement, I was forced to strip off my wet-suit in order to get through. The air was thick with helpful comments and descriptions, the kindest of which was "Like trying to get a marshmallow into a piggy-bank!"

After arriving in the chamber, a quick glance sufficed to show that the pools were in fact upstream, and downstream sumps, in a large and fast flowing stream with a rock bridge in between them. I quickly kitted up with a small bottle whilst Rich rigged a ladder down to the bridge.

A cursory inspection showed that -

- a) The downstream sump was large and roomy for at least 30ft.
- b) The upstream sump was very tight for at least the first 8 to 10 ft.
- c) The stream sumped underneath the rock bridge effectively giving four sumps.
- d) Exit from the sumps was virtually impossible without some form of fixed aid (e.g. Jeff Price or a ladder) owing to the large amounts of mud.

A late exit was made and plans laid for a return at the weekend.

The following Saturday Rich, Chris, Pete Moody and myself returned to the cave suitably equipped. I dived into the downstream sump and made about 80 feet of progress in a rift 2 to 3 feet wide at an angle of about 20 degrees to the vertical, passing a smallish slot en route. This rift dropped almost vertically from the 4 foot diameter pool to a depth of about 15 to 20 feet down a mud and boulder bank to where the floor became small gravel and levelled out somewhat.

Pete then dived into the upstream sump and confirmed that it was very tight for the first 10 to 15 feet with apparently no easy way on.

The trip on the 8th November was a bit of a fiasco. Owing to the fact that one of my valves had packed up I was diving on a single bottle. Picking up the line reel from where it had been dumped I went on and found the passage rising for a short way. Another drop followed leading to a narrowing tube with a strong current and whilst backing out of this I dropped the line reel. By this time I was feeling somewhat cold and lonely (euphemism) so I exited rapidly. My exit from the pool (climbing the ladder with fins on), reduced everyone else to helpless mirth.

Rich took the one remaining working set of kit and dived (?dove!) into the downstream sump as far as the slot. Then he tried his luck in the upstream sump. After descending a tight tube for 10 to 15 feet and finding no way on he returned to find that some cad had moved the sump pool approximately 3 feet to his left. This gave him several somewhat tense minutes while he tried to mine his way out of the cleft that he hadn't surfaced in, using only his helmet. However he got out in time to find the rest of us casting lots for his watch.

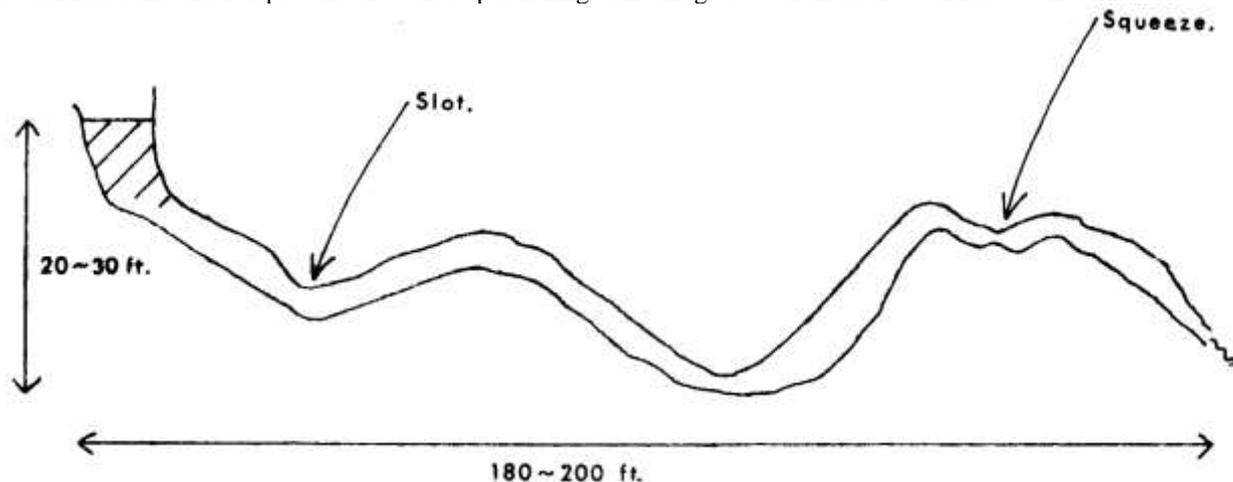
December 12th saw us back complete with Martin Farr who was over on Mendip for the BCRA two day chat. Arriving at the sump we found the water level about 6 feet higher than normal necessitating the negotiation of 4 feet of ladder under water before the diving line could be reached.

This time everything went well, I reached the dropped line reel and quite swiftly sorted out the tangle that had developed, then I pressed on until the line ran out (approx. 180 feet). On the way I found that the passage rose sharply to what - under low water conditions - might well be an airspace and here the floor is once again composed of mud and boulders similar to the floor down from the entry point in Aldermaston Chamber.

Martin was going to dive the upstream sump but he had some form of illness which became progressively worse during the day and so he declined the opportunity.

Meanwhile on the slightly more academic side, a telephone call to Willie Stanton had elicited the information that the stream in

Mangle probably sank at Rowberrow and went to Banwell Risings. Therefore on the 20th December Rich (Barney) Barnacott and I placed a quantity of dye into the stream whilst Willie set up a sampler at Banwell and put some more dye in at Rowberrow. His findings confirmed this and I expect that he will be publishing something about them in the Journal at some time.



MANGLE HOLE - DOWNSTREAM SUMP ELEVATION SKETCH AFTER R.C.H.

At present the upstream sump is too tight and the downstream sump is still going. Our plans at the moment are for one last dive into the downstream sump, and a look into the slot from which the upstream water arrives in the downstream sump and then removal of all the tackle from the cave.

Willie's results and the fact that the sump is just about on the water-table give little or no hope for significant cave finds and hence interest is fast waning and the recruitment of sherpas is becoming increasingly more difficult.

One thing still puzzles us all and that is how the original discoverers (Aldermaston Caving Group) failed to realise that these two pools were part of an underground streamway.

I should like to thank all the people who have helped out on what is essentially quite a boring trip for the non-divers, in particular Rich Websell, Chris Milne, Jeff Price and Rich Barnacott; also Dr W. I. Stanton for his help and advice.

CAVING IN NORWAY

Al Keen

This is only a personal account of the Westminster Speleological Group expedition to Norway in 1977. A full report will be published in the WSG Journal.

Sixteen of us, led by Andy Ive, set off in a minibus of dubious reputation and a Cortina Estate. Some onlookers fell about laughing at the sight, some stared in disbelief, and others just kept well clear. We drank our last pints of English beer and slept on Ripon Racecourse before catching the ferry.

On arriving at Bergen we were greeted by torrential rain. The journey to the first caving area, Rana, took three days, and involved crossing the Jotunheimen Range - testing drivers, vehicles and nerves. At Mo-i-Rana we stayed in relative luxury in a farm outhouse.

The first cave visited, Jordbrugrotten, takes a large stream for over 1000m. Not all of this is negotiable though. We entered the resurgence which forms a 20m waterfall in the side of a high cliff overlooking the Plura Valley. Access is by a 30m abseil and swinging into a ledge in the entrance. Inside, one is first struck by the beautiful marbled grey limestone. Some of the party were nearly struck by an iceberg which had been dislodged upstream. The cave continues through fine, sporting, very cold streamway to a series of waterfall climbs. It is possible to emerge further upstream but time ran out.

Next on the list were Lapphullet and Larshullet with the remote possibility of finding a connection. The climb to the entrances, about 500m, is through a pine forest with magnificent views. This was spoiled however by the need for constant application of repellent to avoid being bitten to insanity by various flying nasties. Larshullet promised a fine trip at 326m x 2500m. The mica schist, which is common in Norwegian caves, takes some impressive forms. Some passages look like medieval torture chambers with blades and spikes which rip boiler suits to shreds. Other attractions include a high chamber, The Storkirk, with a huge jammed block at one end and beautiful folding in the walls.

Saturday evening we sought entertainment in Mo, ending up in a 'dance' where beer was £1.50 a pint. Apparently the Norwegians save up all week and then get plastered. Andy found that they can become very protective towards their women as well. Plans were also made to cross an icy river near the farmhouse. You see, there were 1500 girl guides camped on the other side.

Some light relief was also had surprising tourists in Grønligrotten. The tourist path is somewhat cruder than those in English caves - boots are advised. For the caver there is a labyrinth of sandy passages and a superb streamway connection.

Probably the best day in this area was spent not underground but walking on the huge Svartisen Glacier. This 60km jungle of ice provides ample training for all kinds of techniques. Not recommended for those of nervous disposition.

After a slight disagreement with the owner of the farmhouse, and three days of suffering puns on lemmings, we left Rana and drove through the Arctic Circle to Drag. At twelve o'clock 'sunset' was giving enough light to read by. From Drag we took the passenger ferry (there are no cars or roads where it stops) up the Tysfjord to the Lapp village of Musken. The hundred and forty or so population there are paid by the government just to live and continue the Lapp population. Our litter of equipment rather spoiled what is one of the most peaceful places I have been to - mountains rising straight out of a mirror surfaced, 500m deep, crystal clear fjord and ice cold rivers plunging from mountain lakes. Climbers in the group drooled at the clean, probably virgin, slabs of granite.

Half a mile across the fjord is the start of the climb to Raggie-Javre-Raige, the highlight of the expedition. Raggie follows a thin, inclined band of limestone from about 600m to the exit 100m above the fjord - the second deepest through trip in the world. The organisation of the trip was important as once beyond the main pitch the party would be committed and the only way on is to abseil from the exit straight into a waiting boat. We were entirely self-reliant for rescue. The through trip had only been done once before, by Scandinavian cavers who took 24 hours.

A cold draught followed us into the entrance - a modest looking hole. From there a few short climbs lead to the streamway which thunders its own way down. The way on is a hairy traverse above a waterfall to a free climbable rift which was abseiled. A winding stream passage then leads to the top of Storstupet, a 140m pitch. Here a brew was made and a telephone link set up for the descent. After some delay, half the party were down. We untied the rope and returned to detackle. From the bottom of Storstupet, the cave continues via 'Razor Passage' and Littelstupet, a 50m free-hanging pitch. Ten and a half hours after entering, the bottoming party were through to the cliff face. There they sat waiting for the dinghy in a freezing wind next to a column of ice. At least they were free from the mosquitoes which accompanied the detackling party down to the shore.

Many lessons were learned from this trip:

- 1) Norwegian caves are cold. Few of the party were adequately dressed, and everyone was shivering waiting at the top of Storstupet.
- 2) The idea of splitting into two groups at the top of Storstupet is a good one if numbers are large. A smaller party could probably halve the time taken. Other suggestions included taking only enough rope as was needed for Storstupet and beyond and leaving it behind - expensive but quick, though probably safest as there remains an alternative escape route - or an exchange trip if one could find anyone willing to do the reverse.
- 3) Mars bars cost over 20p in Norway. It is worth taking some food down to keep out the cold.
- 4) A reliable boat is required to ferry across the fjord. We used an inflatable with a small outboard which was too slow. Flares were held by each group and would have proved invaluable for rescue. A useful addition would have been radios.



After Raggie and Musken I thought everything else would be an anticlimax. Norway's stark grandeur, though, is abundant and the next stop, Gildeskal, is no exception. There we had the luxury of a school to stay in. An international gathering of cavers had been arranged and included David St Pierre and wife. One evening was spent giving a talk/slide show to the local people.

The main cave of interest in the area is Greftkjelen or 'Cave of the Lost Waters'. Some of the party succeeded in breaking through to twenty more metres. This superb cave has the possibility of making a through trip to the valley below. Dye tests were made but without conclusive results.

Norway cannot lay claim to the best or most of anything in caving, but there are real sporting trips with a lot of potential. I think we left a good impression and a trail of BEC stickers (from Graham Wilton-Jones) for a return.

THE NEW RECRUIT
OR
WAS IT LIKE THIS WHEN YOU STARTED CAVING?
Anon (Naturally)

I shall never be a great caver. Well, actually I already am a great caver and that is the problem. Let me explain. I am the wrong side of fifteen and a half stones, the wrong side of forty and have been infected by caving.

So now I am a novice caver and if only by virtue of my girth, am truly great.

A trip to Cuckoo Cleaves in August '76 convinced me that this was something I just had to do. Removal to Wells, and subsequent upheaval over, I looked about for someone who knew something about caving. In August '77 fate directed me to the Friday Night Group. "The next trip is Lamb Leer", they said, "Come along and have a go!"

"How kind" I thought, "Lamb Leer sounds so gentle and this nice gentleman sounds so civilised!" On Friday evening I joined a group of intelligent seeming people at East Harptree. In due course I was conducted to a muddy hollow in the corner of which a small man-hole had been raised.

"Down there!" So I went 'down there' and after climbing a series of fixed ladders emerged behind the Beehive Chamber.

I dusted my hands and looked around and thought what a clever chap I was to have vanquished Lamb Leer. My companions seemed to be drifting away downhill so I joined them. Imagine my horror when the passage suddenly ceased. Nothing but black emptiness ahead throwing into sharp relief the figures of my companions who were casting interminable lengths of frail ladder into the abyss.

There were ladies present so that when I was in turn invited to trust myself to this gossamer contrivance, I did not express myself forcibly as is my wont. I therefore found myself doing my first ladder pitch.

Swinging gently on the ladder I clutched it to my bosom with a fervour which would have delighted my wife but which was definitely no way to make progress. Cautiously I lowered myself six inches and fished about below me with my foot. Nothing! Down a little further, another fish around with my boot and again nothing! The rest of the ladder must have fallen off and I must be on the bottom rung! "Give up, go back and let them repair the ladder". I raised my dangling foot and immediately struck the elusive rung.

Both feet back on the ladder, and both hands wrapped firmly round it I began to question the sanity of those who descend into caves and of myself in particular. I cautiously repeated the process. One rung after another. My world shrank to a succession of ladder rungs. I began to make progress and even began to enjoy it. I even opened my eyes!

The ascent was easy. The winch crew wound away so heartily that I merely had time to pat the rungs with hands and feet as I flew upwards. Safely back at the Hunters I felt ten feet tall and it was with difficulty that I was restrained from wearing my caving hat in the bar.

A fortnight later we were at Coral Cave. A 50' ladder pitch, what was this to the conqueror of Lamb Leer! Full of confidence I descended. Boldly and full of confidence I started to climb. At this time my caving kit consisted of old clothes, boots and a helmet. I did not possess a boiler suit. The lamp was on loan. In my trouser pocket was a water bottle for the carbide lamp I had originally intended to borrow.

All went well until I was about 25' up when the water bottle worked its way through a hole in my trouser pocket and started to descend my trouser leg. The contortions on that wildly swaying ladder as I reached up my trouser leg to retrieve the water bottle hardly bear description.

With water bottle safely stowed inside my shirt I started to climb again. More trouble - I had managed to put my foot completely through one of the rungs in such a manner that my boot was trapped. More contortions. Putting one arm through the ladder and swinging by my arm pit enabled the ladder to be passed back over my boot. 'Oh God, how did I get into this mess?'

Free again I laboriously crept upwards. Three rungs from the top trouble struck again. A certain ventilated feel about my nether regions informed me that my struggles had burst the waistband of my trousers and, the zip proving unequal to the task, my trousers descended to my ankles. With them went the last of my confidence and dignity.

My croak of 'I'm in trouble, could you pull a bit harder on the line' brought such an immediate and enthusiastic response that the cool night air was soon blowing around places that decorum suggests would be better unventilated.

My self esteem was not enhanced when I discovered that the spare trousers that I had brought with me belonged to my 12 year old son.

However a hasty detour to my home on the way to the Hunters did not seriously interfere with drinking time.

Since these events I have been awestruck in G.B., flyblown in Manor Farm, soaked in Swildons, stuck in Longwood and enjoyed every minute of it. If I am not down a cave at least once a week I feel distinctly deprived.

HEAVEN AND HELL PASSAGE EXTENSION

by Trevor Faulkner

This note updates the BCRA article on Swildons North West Stream Passage (1) and reports the passing of the Phase 2 dig in Heaven and Hell Passage.

Having spent about a dozen digging trips over a span of ten years excavating the 40 feet of the Phase 1 dig and entering a 45 feet crawl, progress at Phase 2 has seemed quite rapid. In only three further visits by Bob McIntosh, Rich Websell and Trevor Faulkner 35 bowls of mud were removed, together with many rocks and flakes from the walls. On the third trip a nasty bulge in the wall was passed without ducking under liquid mud by wearing a diving hood instead of a helmet. This enabled a long flake to be exposed and partially excavated, but not moved. Explosive force seemed the only way to pass this obstacle to what appeared to be a slight passage enlargement, until the thermal shock treatment used by a friend to mine his way into Hurnel Ridge Sink was realised to be an appropriate and easier method.

Accordingly, on 12 November 1977 Pete Moody, Julian Penge and Trevor Faulkner returned to the dreadful place armed with a Ronson butane blow torch carried in an ammo tin. (Rich had managed to cave somewhere else that weekend!) In the confined space of the dig, the air became very foggy after striking a couple of matches but the blow torch lit easily and stayed alight. It was then carried gingerly along the muddy canal to the dig face and left lying on its side heating the large flake.

After about 20 minutes some creaking noises were heard and later on the flake was found to have neatly cracked along its length. Thermal shock had worked, and in no time the long sliver of rock was dragged back out of the canal. More gardening of rocks was needed before we could squeeze up a muddy slope and reach the bottom of a much larger rocky bedding plane opening.

We went through and stood up in what is really a sloping chamber which turns left (south) ten feet from the squeeze. Amazingly, an empty Fisons fertiliser bag was found at the corner, recognised as being one used in the Phase 1 dig. This bag must have floated along over 100 feet of restricted passage on a rising tide of water during the July 68 Flood, providing further evidence that NWSP flooded by water backing up from the Swildons streamway via the Downstream Choke.

The only way on from Poly Bag Corner is along the large rift passage heading due south. The westward strike passage does not continue, unless it has been obscured by a bank of down dip flowstone. Directly above the Corner an aven with a complicated geometry can be climbed into, but all routes close down or become too small.

Traversing into the rift passage, a small opening in flowstone is crawled through and the passage opens out to be 2-3 feet wide and 20 feet high, terminating at a blockage of crumbling flowstone. The way on is to climb straight up for 25 feet to a level in the roof of the rift and then drop down again for the same distance into the large final choke. At this point the roof of the rift drops more steeply than the 45° bedding and meets the floor of extremely fine mud making a total blockage, which is now the challenging Phase 3 dig.

A week later a party including Rich Websell, Pete Moody, Alison Hooper and Paul Hadfield went back to look at some avens above the top of the rift. There are four of them and none could be pushed beyond a further height of 20-25 feet. The first, above the climb up, is a tight chimney. The second, a little further on, has a fine spray falling from its roof. The third aven is lined with flowstone and is ascended by climbing up from the far lip of the roof passage. The last aven is really connected to the third which has to be traversed across so that the fourth can be reached. Another possibility is an opening in the rift some 15 feet above the floor of the final chamber. The hole is small and needs some rocks to be tickled out of it, but may be large enough to lead beyond the final choke.

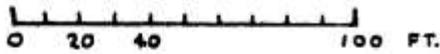
The third aven displays a fine corrosion notch one inch deep in the flowstone wall five feet above the floor of the roof passage, indicating an earlier water level of some duration after the formation of the rift and the deposition of calcite subsequently. This is difficult to explain, as this level is some 60 feet above the present stream level in Swildon II and an open connection to a temporarily elevated streamway water level would surely have caused fluctuations in height and not such a fine corrosion notch. Perhaps instead the ponding was purely local, possibly caused by blockage at the crawl through the hole in the flowstone at the bottom of the rift.

The Grade 3 survey of the extension was made on 17 December 1977 by TLF and RAW using rapid techniques. The survey confirms a point realised previously, that passage features seen in the far end of NWSP have a counterpart in Heaven and Hell Passage. The NWSP dip tubes have evidently formed where strong joints cut the very uniform south dipping NWSP bedding plane and these same joints form rifts and avens in Heaven and Hell, or else mark changes in passage character. It is interesting to note that the size of the feature in each passage is not related to the joint: the phreatic waters which formed the rifts and dip tubes have opened whichever joint was most convenient for the current to follow in each passage.

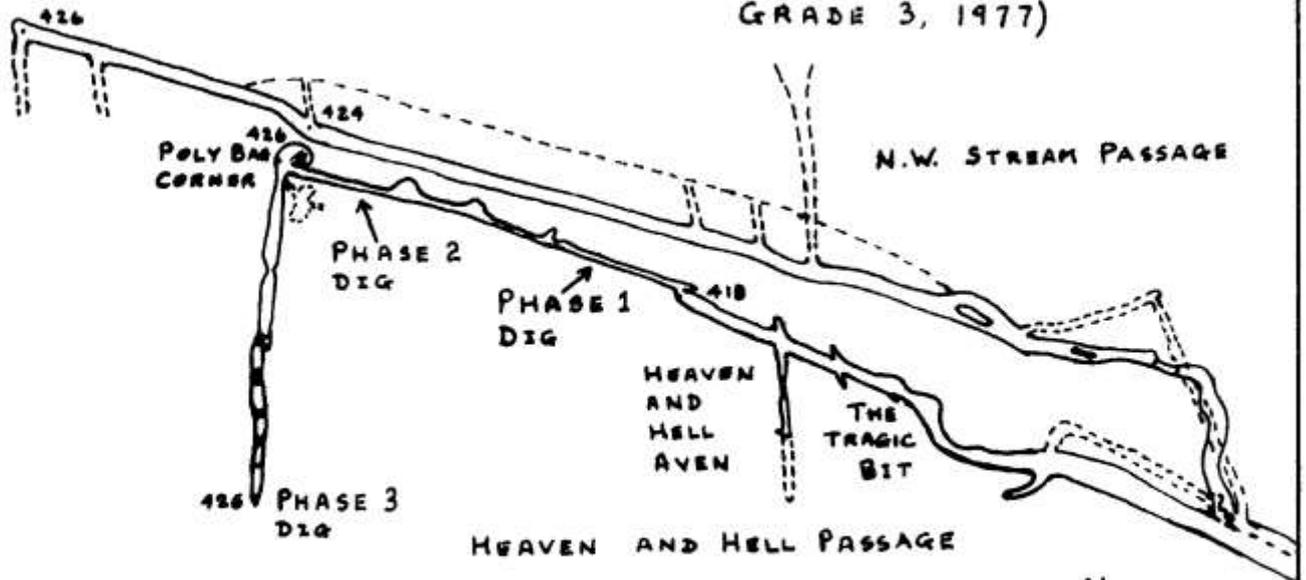
HEAVEN AND HELL PASSAGE, SWILDONS HOLE

SCALE: 1 INCH = 60 FEET

PLAN



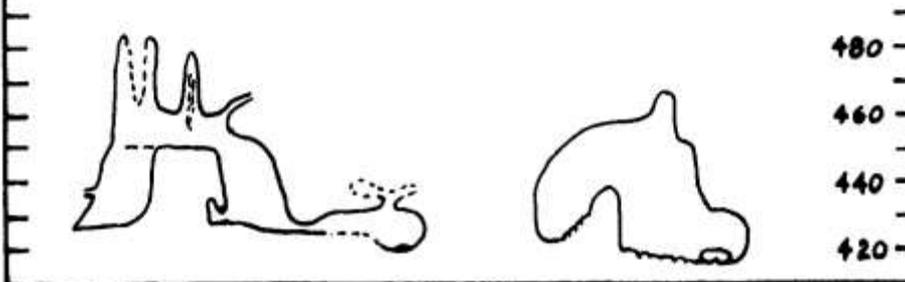
BCRA GRADE 4, 1968.
(DIGS AND EXTENSION,
GRADE 3, 1977)



SECTIONS (PLOTTED ON S-N PLANES)

HEAVEN AND HELL EXTENSION

HEAVEN AND HELL AVEN



TLF

The survey also shows a striking similarity between the Heaven and Hell Aven/Rift and the extension passage. They both extend south as tall rifts along calcited joints with crumbling flowstone on their walls and can be pushed by climbing to higher levels and then climbing down again. Because of its size the extension rift was the main flow route and will certainly provide a major way forward beyond the new dig. Remarkably the far ends of Heaven and Hell and NWSP run together for about 300 feet without a connection being yet found, although Poly Bag Corner can only be a few feet south of NWSP.

The length of the digs and the extension totals 250 feet, making the whole of North West Stream Passage and Heaven and Hell Passage now up to 1910 feet.

The Phase 3 dig will be pursued in anticipation both of a continuation south then west then north and of finding further features aligned with the final tubes of NWSP, the first of which is only 40 feet west of the new extension.

Reference

1 Swildons NW Stream Passage: The First Ten Years. BCRA Bulletin (14) p.17 November 1976.

THE EIGHT YEAR ITCH

Part III - Corrections and Other Work

P. R. Cousins

Soon after publishing the last part of this narrative, the author gained access to a digital computer. Over a period of several months the survey data from Agen Allwedd were fed into a Visual Display Unit, corrected, and the computed passage coordinates printed out. Since only lunch time sessions were possible, progress was slow, but the data are now displayed on twenty pages of print-out, each nearly double the size of the Wessex Journal.

The Aggie survey was recently extended into the Summertime series, giving accurate Altitude data for the first time in this region of the cave. My thanks are due to Pete Moody, and Alison Hooper for assistance with this work. In 1971 the Author, with a party of Wessex cavers, ran an Altimeter traverse through this section of cave. Levels around 1200 feet O.D. were deduced from this trip, but due to lack of corroborative data not published at the time. The altitudes now surveyed in this area are all within 10 feet of those deduced six years ago. This agreement is most gratifying, and supports the conclusions on Altimeter surveying published in the Wessex Journal Vol 12, pp 198-199.

The program used to reduce the survey work was written in BASIC language by the author, with no prior experience of computers. A simplified version is reproduced below to show the ease with which this sort of tedious mathematics can be programmed in BASIC. The program was written for a machine which accepts multiple statement lines (e.g. Wang 2200B), and has a printer with a line width of at least 150 characters (see line No. 10). It is assumed that the convention 'Tripod Stations have even numbers' was strictly observed when surveying (see line Nos. 140, 150). Two input signals have been introduced; A Station Number $Z = 0$ allows a name to be printed, and a Station Number $Z = 999$ stops the program. This latter nearly caused difficulty on the last trip as we actually reached survey station number 999! Many more variations to the program are possible, but details will vary with the machine available. Programming in the BASIC language is relatively easy, and the general flow of operations should be clear from the program. A comparable program written in FORTRAN was published some years ago by the Westminster Speleo Group (Bulletin No.3 Vol 7 1971).

Almost inevitably in processing all the Aggie data, three errors came to light which affect the previously published list of permanent survey stations. This list (from Journal No. 165) is reproduced here with these corrections incorporated, and the additional permanent stations in Summertime Series added.

The revised survey of Agen Allwedd and the Llangattock Caves, drawn by Ian Penney, was recently published by the British Cave Research Association. Copies are available from:

B.C.R.A. Sales (Bryan Ellis), 30 Main Road, Westonzoyland, Bridgwater.

A simplified computer program in BASIC

```
5  REM "CALCULATES CAVE SURVEY COORDINATES"
10  SELECT D : DIM P$ (30) : SELECT PRINT 015 (150)
20  STOP "READY FOR DATA"
30  INPUT "DECLINATION = ", D : INPUT "CLINO ERROR = ", F
40  INPUT "START COORDINATES", E,N,A,L
50  INPUT "STATION NAME = ",P$
60  PRINT "CAVE SURVEY DATA"
70  PRINT "CALIBRATION WAS"; +D; ; " "; +F
80  PRINT "STATION","TAPE","MAGNETIC",CLINO,"EASTING","NORTHING","ALTITUDE", "LENGTH"
90  PRINT P$ ; TAB(64) ; E,N,A,L
100 FOR J = 1 TO 60 : INPUT "STATION NO = ",Z
110 IF Z = 0 THEN 220 : IF Z = 999 THEN 250
120 INPUT "TAPE DISTANCE = ",T : INPUT "MAGNETIC BEARING = ",M
130 INPUT "CLINO READING = ", C : LET S = C +F
140 IF Z/2 - INT (Z/2) = 0.5 THEN 160
150 LET M = M + 180 : LET C = - C : LET S = - S
160 LET E = E + T*COS (S)*SIN(M+D)
170 LET N = N + T*COS(S)*COS(M+D)
180 LET A = A + T*SIN(S)
190 LET L = L + T*COS(S)
200 PRINT Z,T,M,C,E,N,A,L
210 NEXT J
220 INPUT "STATION NAME =",P$
230 PRINT P$
240 IF J = 60 THEN 250 : NEXT J
250 STOP "DATA COMPLETE"
```

AGEN ALLWEDD SURVEY - PERMANENT REFERENCE MARKS

Corrections to data published in W.C.C. Jnl 165 p58

Note: all directions underground are into the cave via North West Junction

UNDERGROUND Location	East (m)	North (m)	Altitude			DESCRIPTION
			(ft)	(m)		
Unaltered data						
Ogof Gam entrance	18738	15842	1194.2	364.0	?	Bolthole on gateframe, lowest on LH side.
Queer Street	18530	15753	1169.0	356.3	D	On RH wall of Queer St., at junction, 9ft above floor.
Main Stream Passage	18467	15572	1134.0	345.7	D	On LH wall of Main Passage, opposite Main Stream Passage, 2½ft above floor.
Erse Passage (end)	18386	15534	1232.3	375.6	D	On lone boulder in floor of final chamber, 4ft from RH wall.
Southern Stream Passage	18810	15308	1139.8	347.4	U	Tip of prominent boulder projecting from bank on LH side of Main Passage, opposite Southern Stream Passage.
Aven Series	19185	15294	1173.9	357.8	D	On LH wall of North Wing, beneath aven, 3½ft above floor.
Bastard Passage	18327	15416	1093.8	333.4	?	On LH wall by junction with main stream, 5½ft above floor.
Second Boulder Choke	18268	15339	1090.0	332.3	D	Near centre of large boulder at start of choke.
Corrected data						
Midnight Passage	18242	15321	1095.9	334.0	D	On LH side of Mud Chamber, 3ft from floor 8ft from Portal of Midnight Passage.
Keyhole Passage	18173	15310	1083.1	330.1	D	Beneath rawlbolt furthest into cave.
North West Junction	17923	15154	1010.1	307.9	D	On RH wall of passage, 5ft above floor, directly opposite entry of Main Stream Passage.
Chocolate Passage	18207	14901	980.5	298.9	D	On RH wall of main stream, at bend opposite Chocolate Passage, 4½ft above floor.
The Narrows	18386	14532	964.2	293.9	B	On LH wall after traverse, but before third choke, by sandbank, 3ft above low water.
Fourth Boulder Choke	18469	14436	964.6	294.0	D	On RH wall of main stream 8ft below boulders of choke, 1½ft below local roof, 5ft above low water level.
Bat Passage	18507	14458	1018.1	310.3	D	On RH wall of Biza Passage after junction 5ft above floor.
Sump Passage	18681	14320	978.2	298.2	D	On RH wall of Biza Passage, opposite Sump Passage, 3ft above floor.
Biza Junction	18667	14278	936.7	284.0	D	In Main Stream Passage, on RH wall 20ft upstream of climb into Biza Passage, left above stream.
Quarry Corner	18821	14292	914.8	278.8	D	On boulder on LH side of main stream, at bend where passage leaves fault, 6½ft above stream.
Higher Traverse Passage	19041	14008	878.5	265.8	D	On boulder in main stream on LH wall, directly below high level inlet, but 150ft downstream of Higher Traverse Passage, 6ft above stream.
Main Sump	19187	13829	845.9	257.9	D	On LH wall of main stream, on rock spur to L of entrance to Southern Stream, 5½ft above low water.
Turkey Sump I	17125	16071	1202.4	366.5	?	On RH wall, 4½ft from water, approx midway between sump and final rift, opposite ledge.
Terminal Chamber	17159	16061	1183.7	360.8	B	On RH wall of Turkey Passage, used as base of running wire for pitch, 3½ft above stream.
Double Oxbow	17414	16002	1168.0	356.0	D	On RH wall of Turkey Passage, 6ft above stream, 5ft beneath entrance to oxbow.
Hawkins Horror	17619	15876	1142.0	348.1	D	About 6ft above stream on RH wall of Turkey Passage, left of entrance to Hawkins Horror and Summertime.
Turkey Chamber	17629	15746	1118.8	341.0	D	On LH wall of chamber, beside climb to chamber continuation, 5ft above slab.
Shattered Passage	17846	15587	1086.9	331.3	D	On large boulder in Turkey Passage at junction, on RH side 6ft above stream.
Coal Cellar Passage	17962	15439	1062.7	323.9	D	On LH wall of Turkey Passage, opposite Coal Cellar Passage, 6ft above floor.
Helicite Passage	17847	15249	1019.4	310.7	D	On LH wall of Turkey Passage, 2ft above low shelf, climb to chamber is approx 10ft downstream.
New data						
Selenite Needle Passage	17630	15942	1189.0	362.4	D	On RH wall of Sand Cavern, 2ft to R of arch into Selenite Needle Passage, 2ft above floor.
Spiral Passage	17773	15955	1189.0	362.4	D	On LH wall of Selenite Needle Passage, 2ft above floor, directly opposite Spiral Passage.
Eastern Avenue	17824	16059	1205.7	367.5	D	On Rock Face between Eastern Avenue and Selenite Needle Passage, 7ft above floor.
Swiss Passage	18033	16032	1206.4	367.7	D	On wall at end of Midsummer Passage, 6ft above floor, at junction with Scree Passage and Swiss Passage.

D Drillmark
U Unmarked

B Rawlbolt
? Non-standard mark

NB: Descriptions and co-ordinates of Permanent Stations on the surface, viz; other caves around Mynydd Llangattwg, were published with the original list in W.C.C. Jnl 165

WATER TRACING NOTES

by *W. I. Stanton*

1. Mells River Sink

This is a rare Mendip phenomenon where a surface stream (Mells River) is linked by a vertical rift to an underground streamway at a lower level. In winter when the water table is high the underground system overflows into the river, the rift acting as a resurgence. In 1974 Wessex Water Authority measured the overflow, using a current meter, at 1.7 million gallons per day. This was much less than the quantity that issues at times of flood. In summer the water table falls below river level, and part of the river flows into the rift among the loose stones and banks of rotting waterborne vegetation that largely choke it. W.W.A. measured the inflow as 0.8 mgd on one occasion.

In 1973-74, with ill-founded ambition, I attempted to trace Halecombe Swallet to Oldford Borehole, using 2 litres of Rhodamine W.T. dye (20% solution). No resurgences were active in the area at the time of input, and Mells River Sink was inflowing. None of the dye reached Oldford; but 5 months later when the Sink was resurging I took a sample and found it positive for Rhodamine. It continued so, at a low gradually falling level, for 58 days. I assumed it was the tail end of a dye pulse that had passed eastward towards Oldford without reaching it, either because of excessive dilution in the Inferior Oolite, or very slow flow in the same formation.

Next summer I tried again for Oldford, again with 2 litres of Rhodamine W.T., injected into the Sink on June 5th. The attempt was partly successful, in that 2 days after input a small proportion of the dye came out at Hapsford Spring (nearly halfway to Oldford). Dye output continued for 48 days of very low flow before the Spring dried up entirely, but none was recovered at Oldford itself although sampling continued for 6 months. I have no doubts that water from the Sink does resurge at Oldford, for reasons explained elsewhere (Barrington and Stanton 1977 page 119), but absolute proof is still lacking. The Egford boreholes were also sampled during this test, and were consistently negative.

2. Lamb Leer

In December 1976 the water authorities became unhappy about the presence of a large dump of treated sewage sludge in the old quarry just north of Lamb Leer entrance. It was important to know to what resurgence the area drained, and I remembered the tiny stream in the Great Chamber, 70m vertically and 100m horizontally from the dump. Input was on January 3rd 1977, when the stream was flowing at about half a gallon per minute, a trickle so small that it took 15 minutes to add the 500cc of Rhodamine W.T. solution without the dye creeping feet away from the water in the thin film of damp coating rocks and mud.

Resurgences sampled were Rodney Stoke (Springhead), Cheddar (First Feeder), Rickford and Sherborne. About 58 hours later the dye began to appear at Rickford, and its concentration soared up to a peak value more than 60 times background. As soon as the arrival was detected, the sampling was extended to Langford Rising, in view of past evidence that the 2 resurgences were linked in some way (Drew, Newson and Smith 1968, page 6), but no dye reached Langford in the 70 hours that it took for Rickford to clear.

I had rather expected the dye to go to Cheddar. Rickford had been second in the betting, and the result, indicating a very low hydraulic gradient of 130m fall over 7000m distance, strengthened the picture of Rickford as one of the old mature resurgences of Mendip's western groundwater province (Barrington and Stanton 1977, page 208). The gradient to Cheddar or Sherborne would have been steeper. Probably there is a degree of geological control, westward flow along the strike being easier than southward flow across the axis of the Blackdown pericline.

3. Bowery Corner Swallet

I had tried to trace this swallet, beside the road near the Mendip Farmers' Hunt Kennels, in 1974 [WCC J 13(157) pp 154-155], and had obtained a doubtful positive at Cheddar (First Feeder) about 72 hours after input. In January 1977 I repeated the trace using 100cc of Rhodamine W.T., and this time there was no doubt that the dye reappeared at Cheddar about 50 hours after input. Peak value was 5 times background. Estimated flow at the swallet was 10 gallons per minute in 1974 and 20 gpm in 1977, suggesting that the faster time reflected the higher stage. Other resurgences sampled were Wookey Hole, Rodney Stoke (Springhead) and Rowpits. All were negative, but a curious result was obtained near the last site, where a rhine draining an apparently unpolluted area of peat moor gave a consistently high (3 times background) reading in the Rhodamine range. No explanation is offered.

4. Cross Swallet

The cruciform depression at the lowest point of Mendip's deepest closed basin was partly filled with old tyres about 8 years ago. It was tested in the hope of defining more closely the ground water divide between the Wookey Hole and Rodney Stoke catchments. A tiny stream collects on the surface of the ancient lake-bed sediments flooring the basin, and runs into the swallet. At input, on January 29th 1977, it was flowing at about 1 gallon per minute. 160cc of Rhodamine W.T. was used.

The springs sampled were Rodney Stoke (Springhead), Hollybrook, Easton and Wookey Hole. Only the latter was positive, time to first appearance being about 35 hours. The groundwater divide is thus shown to lie between Cross Swallet and Brimble Pit

Swallet, and the catchments of two minor springs, Hollybrook and Easton, are likely to be limited to small areas of the south flank of Mendip, not extending beneath the plateau.

5. Acknowledgements

The work of sampling in these tests was fairly onerous, and the assistance of Bristol Waterworks staff in the Lamb Leer trace was much appreciated. In the other traces, Bob Elliott and the guides at Gough's Cave gave regular help, for which I am very grateful.

References

Drew, D. P., M. D. Newson and D. I. Smith, 1968. Mendip Karst Hydrology Research Project, Phase3 WCCOccPub2(2)ppl-8.
Barrington, N. and W. I. Stanton, 1977. Mendip, The Complete Caves and a View of the Hills ppl-236.

EQUIPMENT NOTES

by Mendip Mushroom

It has been reported that the production of Bluewater Rope is no longer in the hands of the original design, manufacture and testing team of Newell, Cuddington and Isenhardt. Subsequent to the takeover, a number of flaws have reportedly been noted in some batches of rope.

Apparently the original trio have got together again over a new project - "Pigeon Mountain" rope. If they maintain or improve upon the standards they set in the production of Bluewater the results should be an impressive, high performance product.

UPPER PITTS - A PLAN FOR THE FUTURE

by Meles meles

It seems likely that in the near future, the Upper Pitts extension will be weatherproofed and fitted out as a workshop, enabling the Club to increase its changing accommodation, and install another shower unit in what is now the workshop. Thus a valuable improvement will have been made to what is already acknowledged as one of the best laid-out and equipped caving club headquarters anywhere.

This should not encourage an air of complacency; there is room for a lot of improvement yet. Although the increased changing and showering facilities will do a great deal to help, two problems remain:

1. The changing area is at the back of the HQ, which is inconvenient, and leads to the tracking of mud through the kitchen into the lounge.
2. The ladies bunkroom is rather small and crowded, and affords little privacy.

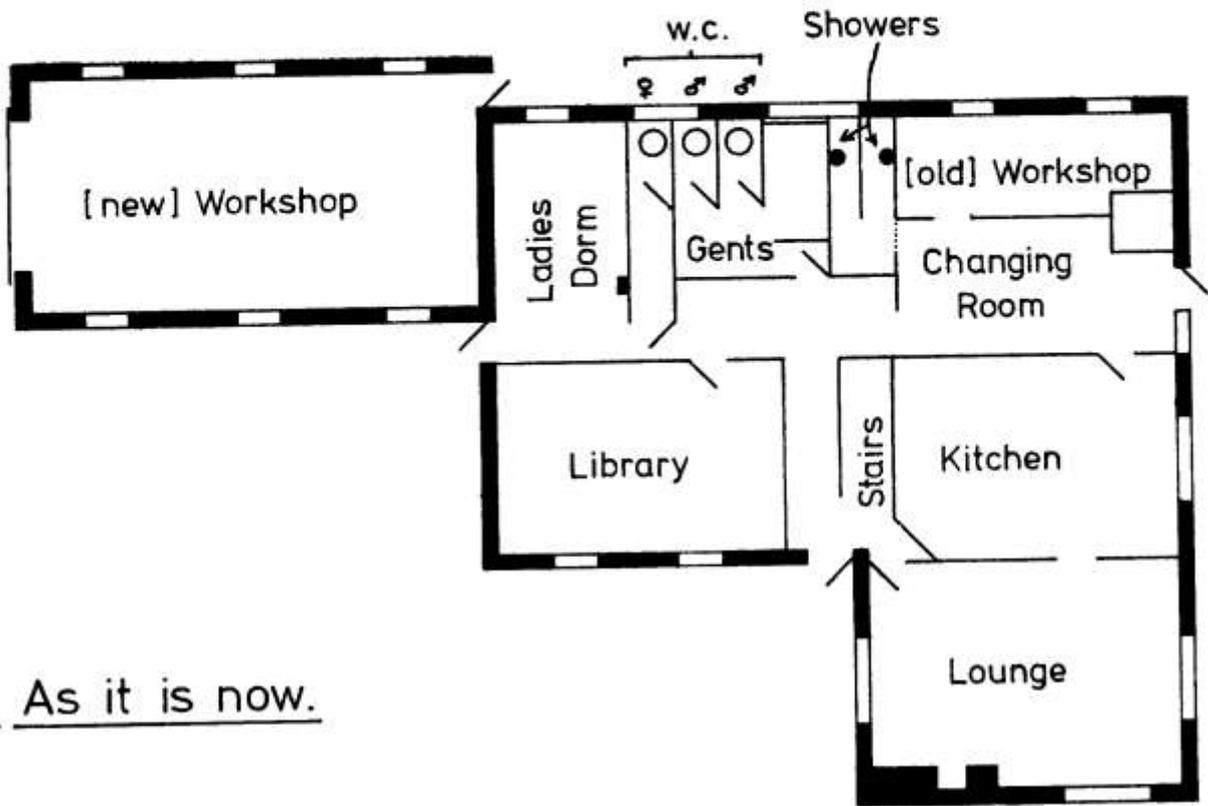
The following suggestions, designed to overcome these problems, are founded on the basic assumptions that we can afford the cost, that the Club as a whole finds them acceptable, and that Upper Pitts itself can tolerate the structural changes necessary. The views are my own, based on regular usage of Upper Pitts, and with next to no knowledge of building design and construction. Thus this article is put forward as a discussion point, to see if my suggestions raise enough interest to develop them (albeit modified) at some unspecified time in the future.

First of all, what can be done with the ladies accommodation? To abolish discrimination between the sexes would not be universally popular, and would only add to the congestion in the main bunkroom. The existing ladies bunkroom and the changing room could be interchanged, as I believe was once the intention, but noise from the kitchen late at night or early in the morning would not endear us chauvinist males to the gentler sex. It is apparent that there is nowhere in the existing headquarters to where the ladies bunkroom could be transferred.

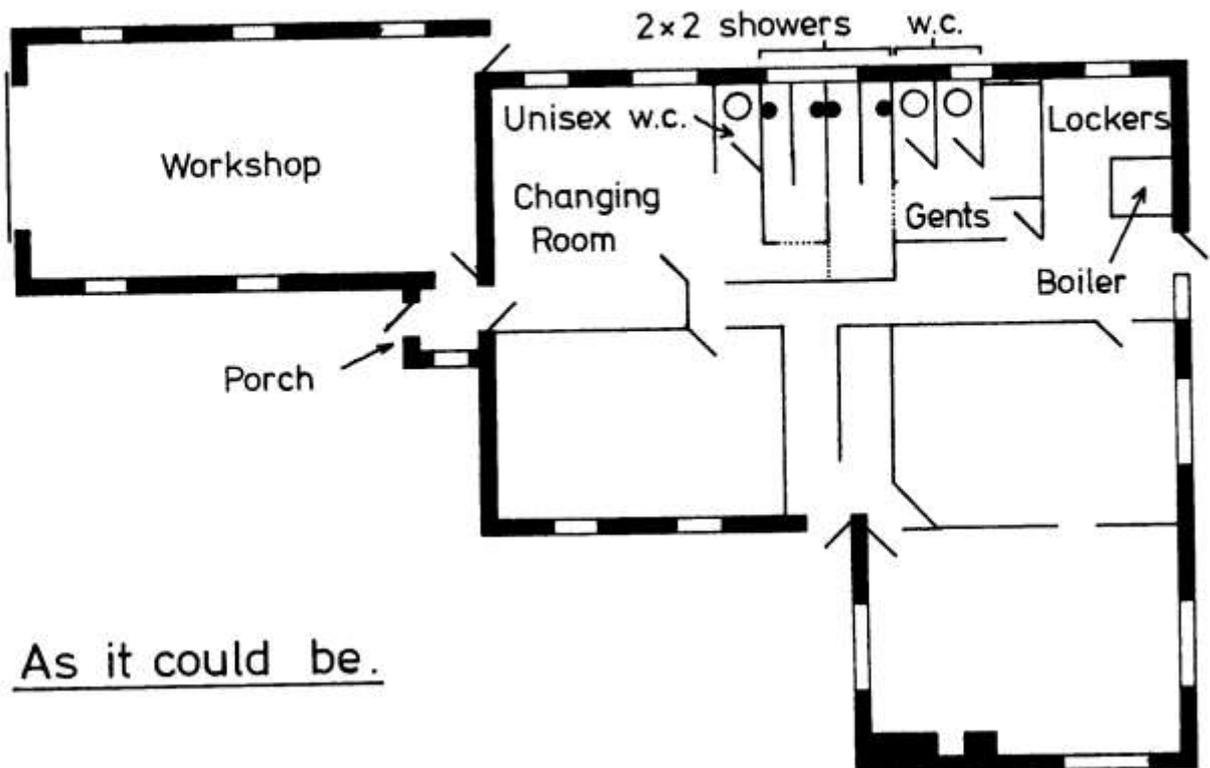
It so happens that our new, cavity-walled extension was designed to take an upper floor. If this was to be built, this would make an ideal ladies boudoir, with space for several more bunks, as well as two w.c.s and even a couple of washing cubicles. To obtain access, we would also have to build a porch enclosing the two existing bunkroom fire doors; this porch would allow access to the new bunkroom from the existing room, and also open out onto the fire escape, which would have to be moved.

We would then be in a position to redesign the entire back part of Upper Pitts, from the fire escape to the boiler cabinet. The ground floor plan shown is self explanatory in this respect. First of all, the wall between the present workshop and changing room would need to be demolished (this will probably take place anyway in the near future; it is not a load-bearing wall, to my knowledge, though an RSJ could be inserted at ceiling level if it is). The gents washroom could then be moved to the other side of the shower unit; if kept to the same layout and area as it is now, there would be room for lockers to be kept by the boiler cabinet. The existing showers would be left where they are, except that access to them would now be from the other side. It may, in fact be advantageous to leave the present entry, to allow access from the washroom.

POSSIBLE ALTERATIONS TO UPPER PITTS



a) As it is now.



b) As it could be.

The walls between the present ladies bunkroom, w.c. and the gents could then be removed. The right-hand w.c. could remain in place, and a further two shower units built where the gents urinal is now. The other w.c. would be removed, and the corridor terminated at the library, where a door would give access to the new changing room, which would be nearly the same area as the combined area of the existing changing room/workshop, excluding the areas of the new showers and w.c.

Cavers in kit would enter the changing room via the porch, which would also allow us to install a door into the extension workshop. Entry to this from inside Upper Pitts would have its advantages; A further door could be placed where the ladies bunkroom window is now, opening onto a concreted area where kit could be washed and dried. The changing room would have plenty of hooks for clothes, a ready-use tackle rack, cell chargers and a drying rack for kit.

The advantages of this arrangement would be many fold. No more would the changing room be part of a major thoroughfare, and cavers would be segregated from the 'clean' parts of the HQ. The ladies would have two w.c.s and privacy in which to wash (they assure me they do perform the ablutions on occasion) while there would be a 'unisex' w.c. in the changing room, a boon to cavers in kit, and an overflow for those Sunday mornings when the gents is very much in demand. The new pair of showers would be a 'ladies' prerogative if there were any in a caving party; otherwise they would enable a party to shower without the long wait which can now happen. Very importantly, cavers would enter the changing room from the car park by the first door they came to. Access to the extension from inside Upper Pitts would help here as well. One disadvantage to my suggested system would be that it would be more difficult to summon a cup of tea after a trip, but this is a minor point.

Club pessimists will no doubt worry about the cost, the plumbing and construction problems, and the upheaval that would result if building work were to begin anew. I sympathise with the view that the present alterations are not yet complete and that when they are, we should be able to sit back, enjoy and appraise the new layout. But this should not preclude all attempts to improve our facilities still further. Hopefully, members will make their views felt in this journal, as well as at Upper Pitts and in the pub. If there is enough interest, it may be that the Committee can be approached to ascertain more fully the prospects for maintaining the lead which the Wessex undoubtedly already has in the field of headquarters design.

SALES LIST MARCH 1978

Articles available from Upper Pitts are as follows:

Club Ties	£1.50	
Club Badges	.30	
Car Badges	2.50	
Fixing Clips	.10	per pair
Ammunition Boxes	1.00	Large
	.75	Medium
	.60	Small
Rapide Links	1.00	Large Galvanised
	.75	Small Galvanised
	1.80	Small Stainless Steel
Nife Bulbs	.30	
Nife Armour Glass	.15	
Edison Bulbs	.50	
Electrolyte (Alkali)	.10	per individual cell (bring your own bottle)
Crane Boots	8.50	per pair
(Leather, External Steel Toecaps, Commando sole)		

BOOKS

History of Swildon's Hole	£12.00	Leather bound
9.00 Rexine bound Ghar Parau	1.50	
Great Storms and Floods of 1968 on Mendip	.60	
Pioneer under the Mendips	.60	

PUBLICATIONS FOR SALE

The following publications are available from R. R. Kenney, 'Yennek', St Marys Road, Meare, Glastonbury, Somerset BA6 9SS.

		Postage
Mendip Karst Hydrology Research Project Phase 3	50p	+ 10p
Reprint of Wessex Journal Volume 1	38p	+ 15p
Supplement to Volume 8 Wessex Journal	25p	+ 15p
Journals Vols up to 11 inclusive	15p	+ 7p
Journals Vol 12 and 13	20p	+ 10p
Journals Vol 14 and onwards	30p	+ 10p

BRIEF SUMMARY OF CONTENTS

Mendip Karst Hydrology Research Project Phase 3

by D.P. Drew, M.D. Newson and D.I. Smith, 28 quarto pages.

A study of the caves and risings in the Burrington, Rickford and Langford areas.

Journal Volume 1

This covers the formation of the Club in 1934 and its development up to the end of 1950. Includes the discovery of Primrose Path in Eastwater and Dallimore's Cave.

Volume 8 Supplement

Extracts from the diary kept at Hillgrove during the 1950's. Approximately 60 different caves are mentioned in the text.

Journals

We have sold all copies of the earlier Volumes and our stock begins with odd copies of Volumes 9 and 10. Volume 10 The Mossdale disaster, Read's survey. Shatter Cave. 1968 flood.

Volume 11

Wookey Hole 20. Lionel's Hole. Spain 1969. Mangle Hole. Rhino Rift. North Hill. This is one of the best Volumes for Book Reviews.

Volume 12

Rhino Rift. Hutton Cavern. Spain 1972. Early dives by Graham Balcombe. Caves of Portland. Castleguard Cave. Manor Farm.

Volume 13

Sites in Fairy Cave Quarry. Wookey Hole 9. Thrupe Lane. Saga of Cowsh Aven. Spain 1973. Spain 1974. Filming in Castleguard. Spain 1975.

IMPORTANT NOTICE TO ALL NEW MEMBERS

When the Journals are printed there are always some spares at the end of the run. Firstly one cannot stop the press at a given exact number and secondly one must allow for errors, faulty stapling etc. Over the years these spare copies have been accumulated and we must do our best to get rid of them in a profitable and useful manner. Quite naturally we charge full price to non-members otherwise they would buy the Journal but wouldn't join the Club and pay their fees. There must be many members who would like to read the old Journals but who do not want to find themselves paying a large bill. This is covered quite simply by two facts. The last AGM said that we must get rid of them in a useful way. The second fact is that ANY receipts are of value to the Club. What I would like you to do is to let me know your requirements. I will quote you a price which benefits the Club and yourself. If your circumstances are such that this price is still too high then let me know and we will adjust it. A flexible scheme but the important thing is to SELL Journals to people who want them whether they be impoverished youngsters or impoverished adults.

Any member has the opportunity of procuring a set of Journals that cover the last ten years. Just drop me a line and let me know if you can pick them up from Upper Pitts when they are ready. Don't forget that in another ten years these old issues may be unobtainable. Put pen to paper NOW.

Richard Kenney

HORSESHOE HOLE DIG 15th January 1978

Just for the record, no less than *sixteen* W.C.C. members were to be found frantically grovelling in this hole - "God knows why". If we could get this many helpers every weekend the W.C.C. would break into a new cave in no time at all.

AI Mills

NATIONAL CAVING ASSOCIATION

Bulletin No.4 - October 1977

The fourth and last round of NCA meetings for the year took place in Ribblesdale, Yorkshire on 1st October. The Bradford and Craven pothole clubs kindly provided the venues. Most of the business was concerned with concluding a few outstanding items, and with preparing for the Annual General Meeting of the Association to be held in South Wales on Saturday, 3rd December at the Castle Hotel, Tredegar. Arrangements are being made by the Cambrian Caving Council.

Before looking ahead to the AGM and beyond, it is appropriate to review the highlights of the past summer which NCA has supported with encouragement and, of course, funds from the Sports Council.

Pride of place surely goes to the Seventh International Speleological Congress held during the first three weeks of September. Judging from the well-deserved accolades given by both visiting delegates and our own cavers, it was an outstanding success. Thus, the optimism and hard work of all its organisers have been vindicated, and many contributors are to be thanked for their efforts on behalf of both international and British caving. The innovation of the regional caving camps before and after the main congress was a notable breakthrough which brought numerous cavers together in the best way - by going down caves with each other.

We wish our American friends well in their preparations for the 1981 Congress in Kentucky. Eric Catherine, Secretary of the Cave Rescue Council, has been appointed Secretary of the Cave Rescue Commission of the International Union of Speleology until then and it is felt certain that our expertise and experience will be of help in other fields too when the time comes.

Also to the fore overseas, it is pleasing to report that Sid Perou from the north, and Nicholas Barrington from the south, were given awards at the First International Film Festival of Speleological Films held in France recently. Sid Perou received a special prize in recognition of the high standard of his work and a further award for his dramatic 'Sunday at Sunset Pot'. Nick Barrington was awarded a prize for his film 'A World Apart'.

For more cavers than ever before, the past summer's expedition abroad has hopefully been another highlight of the year. NCA has assisted nine ventures with grant aid and we look forward to reading their respective reports in the caving literature in due course. Those contemplating expeditions abroad next year are reminded that the Ghar Parau Foundation must receive detailed proposals with estimates by January 1978. Explanatory papers with notes for guidance and the necessary application forms are available through the bodies of NCA.

The domestic scene is equally encouraging even if less in the limelight. Contracts with the Nature Conservancy Council have now been exchanged regarding the revision of caves needing protection as Sites of Special Scientific Interest and the necessary working party has been established. Plans for a future film on cave conservation are well advanced and all looks fair for a symposium with National Park Planning Officers and the Countryside Commission on caves which fall within the ambit of such authorities. More key equipment information has been distributed, and after much research, a full statement has been prepared for the Department of Education and Science as to how novices may be best introduced to caving our way rather than anyone else's. This report is based upon replies to questionnaires made available to all clubs last year. Its influence will be crucial. As growing numbers appear to be introduced to caving via institutions under Local Education Authority control every effort is necessary for NCA to avoid falling into the unfortunate rift that has apparently severed the British Mountaineering Council and Mountain Leadership Training Board.

So in a year during which all facets of our caving community have grown closer together and have been seen by the rest of the caving world to be working harmoniously, it must be hoped that NCA can continue to fulfil the role that emerged so strongly from the Working Party's report on its future, tabled last year. It is worth reminding ourselves what this should be; namely a representative federal body fostering co-ordination and co-operation among all those who go underground. And definitely not a directorate aloof from those who find and explore caves.

Jim Hanwell.
Wookey Hole
8th October, 1977

REVIEWS

Down to a Sunless Sea by J. M. Boon, 1977.

The Stalactite Press (13 Hamilton Rise, Baddeley Green, Stoke on Trent, Staffs.)

105pp, 5 surveys, £7.50

Mike Boon came to Mendip in the vintage years when Swildon's Hole seemed endless, and discovery after discovery was being made there by a group of young Shepton and Wessex tigers. Mike joined this legendary band (the nucleus of famed NHASA), and soon acquired a doubtful reputation as one of its hardest and wildest members. He was something of a loner, and it was rumoured that he survived for weeks on nothing but tinned rice pudding.

Was Boon human? His book reveals that he knew danger and fear like the rest of us, and it was the heady thrill of being first into the unknown that overcame his natural caution in situations where others would have paused. Your reviewer did not know him particularly well, and it came as a surprise to find that he sees the caves with an artist's eye. He particularly loves the underwater scene, the colours and forms of gravel and rock, and the crystal clarity or blinding murk of sumps. Sometimes his choice of words is sheer delight.

The first chapter is a very personal account of the pioneer dives down the Swildon's streamway into Six, Seven and Eight. No other published work describes them in such detail. It was Mike who, after the first epic of endurance (access was then by way of Paradise Regained and Blue Pencil), eased the way to Seven and Eight by making the first passage of Sump 3, of which he tells most prettily.

Mike coveted, and would take risks for, the excitement of being first, and he usually managed to work his way to the front. To his colleagues he sometimes seemed reckless, but he was definitely not fearless, as recounted in a dramatic story of being stuck fast underwater in Sump 8.

Swildon's tales are followed by an interlude in Ireland, where Mike bottoms the smelly but spectacular Polyfilla Pot. Then back to heroics, in Mossdale, where he finds an easier route to the end of Far Marathon, but fails to pass the downstream boulder chokes.

It takes a certain temperament to hire a donkey in County Cork and ride to Tipperary, to borrow some old clothes from the Mitchelstown Caves guide and explore a new swallet. Mike Boon had that temperament. He many times caved alone in Ireland, on one occasion diving a new sump, Casteret fashion, in Cradle Hole. While in County Clare he briefly joined the student team of a powerful English professor man, but was less impressed by their dedication to their work than by the two dissidents who preferred mixed wrestling contests on the hotel lawn.

The last two chapters deal with foreign caves. Mike went three times to Yugoslavia, twice on his own. He apparently lived off the country, and by solo diving found important extensions to some of the great caves of the Postonja polje. Then, in Jamaica with others on a seven-month-long caving expedition, he took part in bottoming the vast Quashies River Cave and adjacent systems.

The book is not long, and the only illustrations are 5 surveys, of which the 4 at the end fold out very conveniently. Nevertheless I found it good reading, not least for the picture it paints of its author, who is by no means an ordinary caver.

W.I.S.

"CAVING" by Cecil Cullingford.

A Thornhill Guide, 40p

Thornhill Press, Gloucester.

23 pages of text, and five of photographs.

"Caving" is a pleasantly-produced beginners' guide by a Vice-President of the Wessex. Although rather slender, and probably not enjoying the advantages of a large printing run, the book seems reasonably priced at 40p. It is very proper that a book should be written for those whose approach to a new subject begins in a library or a bookshop; the volume contains enough information to put isolated would-be cavers in touch with their nearest club. In fact the author gives a special recommendation to what a disobliging printer has rendered as the "Wessex Caving Club".

There is an excellent beginner's introduction to the formation of limestone and the caves therein; perhaps a line-drawing would have helped to clarify the detail. The drawings which are included are admirably done, especially those of live and fossil fauna. There is also just the right amount of tantalising reference to the different branches of cave science, and a short list of further reading, with very helpful comments about each book.

I am not completely happy with the logic of the book's arrangement: the sections entitled 'Caving Introduction', 'Why Go Caving?', and 'Caving for Sport', at the beginning, in the middle and near the end respectively, contain very closely related information which might have been better together. However there is some splendid writing in the book: I like the comparison of a caver in a boulder ruckle with a fly in a bowl of lump sugar, and Mr. Cullingford's descriptions do full justice to the marvellous

variety and beauty of things seen underground, as well as to the complete sound spectrum from total silence to the totally deafening.

Would a beginner find all that he wants here? I think the answer is yes, though I should like to suggest that the information about lighting, clothing, footwear and other equipment might have been tabulated in the form of a kit-list, including a section on what not to take into a cave. The question of lighting for beginners is the one about which least agreement exists; the author prefers acetylene after considering the pros and cons of carbide and dry-battery lamps. I feel that there are some people who are incapable of managing a carbide lamp. Perhaps they ought to stop caving, or graduate at once to a more modern (and more expensive) type of miner's lamp.

Enthusiasm is what the novice needs to absorb from his or her more experienced mentor, and this is a quality which Mr. Cullingford not merely has in abundance, but knows how to transmit to his readers. Those who read this book are very likely to find themselves recruited, or if they already cave, to wish they too had the author's skill in evoking the fun and the fascination of the sport.

P.G.

Single Rope Techniques
A Guide for Vertical Cavers by Niel Montgomery, 1977
Published by the Sydney Speleological Society
(Occasional Paper No.7)
Price £4.95

In this publication Montgomery succeeds in putting a somewhat complex and controversial subject in plain and simple language without omitting, as far as I can discern, any basic essential.

The chapter headings cover the subject of S.R.T. from rope construction and properties, through knots, rigging techniques, abseiling and prussiking, to vertical caving efficiency and self rescue techniques.

Most cavers will naturally find the meat of the book to be the chapter dealing with abseiling and prussiking, although to my mind some of the most valuable material is in the chapter on anchors and rigging (having personally seen a supposedly experienced caver place a Channel Peg for a main belay 90° out of position). Here both novice and tyro will learn something although personally I would disagree with his comments on mild steel pegs. It is also good to see a section dealing with artificial chockstone belays underground, an area where the caver could well profit from the experience of the rock climber.

The abseiling section goes from the classical "Hot Crutch" to Super Rack techniques and includes brake bars, crossed karabiners, figure of eight and fixed bobbin devices. Those people who are trying to initiate the use of lifelines for S.R.T. have their point of view intelligently considered and rapidly disposed of in favour of the trailing ascender brake or bottom belay technique. Only two of the illustrations caused me to gulp a little, those of brake bar rigs with the rope threaded through the wrong side so that the gates would be unnecessarily loaded on the rappel, a condition that has already caused accidents in the States. It intrigued me too, that although the text recommended using karabiners with the gate openings upward, the illustrations for the most part showed them with gate openings downward.

Prussiking devices are dealt with from knots to all the mechanical devices currently available on the open market. Sensibly, the techniques employed are dealt with in two major categories, Ropewalking and Sit-Stand Systems. The advantages and shortcomings of the various rigs are discussed in relation to their suitability for different cave pitch types *e.g.* long or short, free hanging or tight, and their performance with regard to factors such as speed on the rope, on and off times, and complexity. Techniques for changeover, break over, crossing knots, tyroleans and tandem prussiking are also very effectively dealt with.

All in all, although the book lacks the detail of Thrun in any one aspect of prussiking and naturally has already been outdated in certain details of technique, as is only to be expected in such a rapidly evolving subject, Montgomery presents the reader with a very fair summary of the 'State of the Art' in mid-1977. He does this without making the mistake of being over dogmatic in his judgements and I feel this book will be a standard text on the subject of S.R.T. for some time to come, providing original material for the novice, and a source of ideas for the tyro.

Mr. Montgomery is to be congratulated on a very competent effort.

P.L.H.

FROM THE LOG

15.5.77 LONGWOOD SWALLET

Paul Hadfield, Al Mills and Pete Moody. Charge exploded at the very end of Reynold's Passage (at the base of Fanny's Rift). Passage can be seen to open out a few feet further on and a large stream can plainly be heard.

22.5.77 LONGWOOD SWALLET

Paul Hadfield, Al Mills, Pete Moody and Bob Lewis. Banged again at the end of Reynold's Passage. Way on should now be open.

28.5.77 SWILDON'S HOLE

Pete Moody, Alison Hooper, Dave Walker and Graham Veale (non member). 75 bucket loads removed in an amazingly short time. Used another bottle of oxygen at the dig face. All completely done in but the dig looks promising again.

4.6.77 LONGWOOD SWALLET

Al Mills, Pete Moody, Alison Hooper and Jeff Price to Reynold's Passage where the end had become very constricted. Banged again.

5.6.77 SWILDON'S HOLE

Pete and Alison, Keith Jacobs, Jeff Price. Sidcot Dig: 60 bucketful's removed before the air gave out.

6.5.77 WOOKEY HOLE

Rich Stevenson and Jeff Price. Both divers went to Wookey 22 each carrying three cylinders. Each left one in 22 for the big push next weekend. Fine trip. Visibility very good.

4.6.77 STREAM PASSAGE POT, GAPING GILL

Paul Hadfield, Rich Websell, Beth Yates and Al Keen. Visited GG Main Chamber but missed seeing Dooley who had entered via the Bradford Winch. Exit was made through Disappointment Pot.

5.6.77 ALUM POT

Paul, Rich, Beth, Al, Pete Slater, Dave Walker and Jane Wilson (BEC). Paul spent the day yo-yo-ing up and down the open pot with the BEC. The rest went down Lower Long Churn Cave to the Bridge, some down to the sump in Alum.

6.6.77 TATHAM WIFE POT

Al, Pete and Jane. Joined later by Dave and Graham Veale to meet up below the third pitch.

7.6.77 JUBILEE DAY. KINGSDALE MASTER CAVE

Pete, Al and Beth in through Valley Entrance.

8.6.77 SWINSTO - VALLEY ENTRANCE

Pete, Beth and Rich. With Rich to hold our hands. We managed to find the entrance to Swinsto and do the through trip. Impressive and enjoyable.

9.6.77 OUT SLEETS BECK POT

Rich, Beth and Trevor Faulkner. A great little hole, more varied than most of the Yorkshire pots I've seen. Deluge Pitch was in fine form. Afterwards we spent two hours wandering along the riverbank looking for promising holes. Beautiful countryside. (The last six entries penned by the claw of the "Bionic Tortoise" - Ed.)

6.6.77 JUNIPER GULF

Black Maggot and Mendip Mushroom. Low water, nice pitches, nice trip.

7.6.77 RIFT POT

Black Maggot and Mendip Mushroom. Impressive Pot. We had re-belayed the rope 50ft from the top of the big pitch (195ft). On the way out the belay broke. Exciting moments!

11.6.77 RHINO RIFT

Al Mills, Rich Websell, Mike Roger and Rob Harper. Rob climbed across the roof of the second pitch to investigate a passage. 20ft of aven reached but was too tight to enter. Very interesting climb.

12.6.77 SWILDON'S HOLE

Ian Jepson and Colin Williams. Delivered polly bags to Good Stuff Dig. Site was moderately flooded and the right hand wall had completely slumped to leave a rock wall. Still a practicable dig but in need of a new dam further up the passage and a lot of hard digging.

25.6.77 DAN YR OGOF

Black Maggot, Mendip Mushroom and Fists of Fury (all BMCG) to Pinnacle Series. A very fine trip to the end. The climb up is a little hairy and loose - ("Clean underwear please Watson!"). Formations mind blowing. Hardly anyone else in the cave.

N.B. There is a fixed rope up into the Series and anyone going there might find some form of prussiking device handy to enable them to rest on the final 25ft.

10.7.77 LUDWELL CAVE

Paul Hadfield, Rich Websell and Jeff Price. Rich held a line through the sump and was followed by Paul and Jeff, who became temporarily stuck under boulders due to bad visibility. Good training dive, 40ft long and very interesting. Line left in the cave. Water flow nil.

10.7.77 LONGWOOD SWALLET

Al Mills, Pete Moody, Alison Hooper, Mike Taylor + 1 (both SVCC). Reynold's Passage is now becoming a ! Not an enjoyable trip. Banged again.

25.6.77, 9.7.77 and 16.7.77 SWILDON'S HOLE

Pete; Alison and Pete; Alison, Pete, Jeff Price and Chris Milne. Sidcot Dig. The first two trips mainly digging and the third mainly clearing spoil. About 120 bucketful's removed in all and the dig has gone vertically upwards for about 8ft. A ladder is now needed to continue digging in the roof and the air is still lacking oxygen.

17.7.77 SWILDON'S HOLE

Al Mills, Pete Moody, Alison Hooper and Paul Hadfield. Al and Pete straight down to IV to lay a charge in the dig. Alison and Paul carried a 5½ft rigid steel ladder to the entrance to SE Inlets in readiness for the next session at the Sidcot Dig. All met up to help with the dig before banging.

26.7.77 STOKE LANE SLOCKER

Rich Websell, Al Mills, Rob Harper and Chris Batstone (BEC). Trip to Stoke IV. Rob climbed into a passage 100ft downstream of sump 2 about 15ft up the left wall. 10ft of oxbow found - ("Rectal Diverticulum Passage"). Very good trip.

(A very good effort Rob, B+ - I.J.)

2.8.77 SWILDON'S HOLE

Al Mills and Pete Moody. Down the streamway to bang the IV dig. A bit of bailing was needed before we could get in and lay a charge at the very end.

2.8.77 SEA CAVES NEAR ST. AGNES COVE, CORNWALL

Bob and Golly Scammell. Left of St. Agnes Cove are 2 large entrances connected by a duck at low tide. The first cave connects at the back with a long tunnel leading through the cliff to the sea in the next cove. This contains deep water even at low tide. A small tunnel also runs from the first cave through cliffs to the remains of an old harbour.

5.7.77 SWILDON'S HOLE

Pete to the IV dig. Passage had opened up very nicely, however instead of being able to dig up the far side of the U tube it looks as if more bang is needed.

6.7.77 SWILDON'S HOLE

Pete, Alison and Milch (SMCC). Sidcot Dig. 60 bucketful's removed very strenuously. The ladder taken down on the 17th July is very useful. Dug up through a solid gravel layer then a 6 inch clay layer to a calcite band - stratified stal.

SWILDON'S HOLE

14.7.77 Rich Websell, Dave Walker, Al Mills, Paul Hadfield and Jeff Price. Down via the streamway to FU2 in VII, losing people on the way. Climbed aven (very hairy) to replace the ladder removed earlier. Aven is now laddered to 20ft above the streamway and work can continue upwards (?).