



## WESSEX CAVE CLUB

Journal No. 108, Vol. 9.

September 1966

### CLUB NEWS

#### Annual General Meeting and Dinner, Saturday 22nd October

The A.G.M. will be held at Priddy Village Hall once again, starting at 3.0 p.m. prompt. Notices of motions for discussion and nominations for Officers and Committee must be forwarded in writing to the Hon. Secretary by 30th September 1966. Such notices must have the signatures of the proposer and seconder, and nominations for Officers and Committee must be signed by the nominee.

A full Agenda with details of motions and elections will be circulated in accordance with Rule 18, and will be accompanied by the Hon. Secretary's Annual Report, the Minutes of the 1965 A.G.M., and a Statement of Accounts for the Club Year 1965-66.

The meeting this October will undoubtedly prove an extremely significant one in the history of the Club in view of our ambitious New Headquarters Project. Please make every effort to attend in order to ensure that any decisions made are representative of the entire Club.

We look forward also to the company of many members and their friends at the Annual Dinner the same evening. This will be held at The Caveman Restaurant, Cheddar, at 7.30 for 8.0 p.m. Tickets at 17/6 each will be available from Paul Duck, 13 Goodymoor Avenue, Wells, Somerset, as from October 1st. Members are requested to book as early as possible to avoid disappointment, as seating is limited to 150. Please make cheques and postal orders payable to "Wessex Cave Club" and enclose a stamped addressed envelope to facilitate the prompt return of tickets.

#### New Headquarters

Having "jumped the gun" in the previous issue, full details and drawings of the proposed development were circulated at the end of August. If any member has not received this communication copies can be obtained from the Hon. Sec. on request. Please give it your utmost attention and action so that the project can be discussed fully at the A.G.M.

While it is intended that the whole scheme will be amplified in the Secretary's Annual Report, the following are a few observations on the project.

The Development Sub-committee have planned a programme of site works which are to be completed by October and are well under way at present. Members are requested to inspect the field during their stays on Mendip in the near future. Don't confine your visit to the day of the A.G.M., however, but write now to Phillip Davies offering your practical assistance. Over the next few years a great deal will need to be done by members to realise the great ambition we have of building a Headquarters worthy of the Wessex; somewhere which will prove the ideal base not only for our ever-growing number of cavers on Mendip, but for all the many activities which bond present and past cavers together into a thriving Club.

Some members may feel that the organisation of such a project goes beyond the real aims of what we generally think of as a "club". There can, however, be no fixed definition of a club and the facts are that the Wessex has grown larger than fellow clubs simply because we have always attempted to keep in the forefront of the caving world. We feel confident that the club will benefit in the years ahead through the successful completion of this project. To voice the same sentiments as those who built our invaluable Hillgrove HQ, and to whom we owe a great debt, we cannot, and must not, look or go backwards.

It may be felt by some members that our chances of being awarded a Dept. of Education & Science Grant are rather remote due to the present financial conditions in this country. Our application for a grant is, however, at present being considered by the appropriate body on the Somerset Education Committee and we are assured that any existing Government moratorium will not affect our chances of success - our case will be considered entirely on its merits. We have, therefore, every reason to feel optimistic and in fact arrangements have been made for a joint site inspection by officers of the Grants Committee from the County Education Dept. Time alone will tell of course but we must plan on the basis that the Wessex is a club capable of achieving the highest possible standards.

### Erratum

An omission in the last two official issues of the Club Rules has been drawn to our attention. The current Rules were published in Journal No. 104, December 1965. This error is very much regretted and the missing phrase seems to have been left out following the AGM Report in Journal 82. In the following reprint of Rule 2 the missing phrase has been underlined:-

2. That the objects of the Club shall be to promote the sport and science of caving by:-
  - a) initiating newcomers into the best tradition of the game
  - b) gating caves that are likely to be despoiled
  - c) publications
  - d) organizing gatherings to explore or excavate
  - e) by arranging for Members to visit caves in districts other than their own
  - f) erecting and maintaining huts where members can stay while cave hunting
  - g) maintaining gear for the use of members
  - h) maintaining for the use of members a library of books, literature and maps.

Members may care to amend their copies of the Rules from Journal 104 in accordance with the above.

### Swildons Hole

Following what now seems an annual pattern during holiday seasons, flooding this August occasioned two inexperienced cavers to get trapped below the Forty. It would appear that it is a never ending task to remind newcomers of the conditions under which the cave floods. Rightly beginners are always trying to develop their experience in Swildons, but all too often they do not seem to appreciate how quickly the whole mood of the cave can change. They are thus caught unprepared without the knowledge of how to help themselves.

It is a simple rule to take adequate clothing and lighting down a wet cave like Swildons and a wise precaution to take note of the previous week's weather and local outlook. In the case of the latter one should

always be prepared to seek Mr. Main's advice, for a heavy storm on an already saturated soil will find its way into the cave within minutes, to cause sudden flooding. The existence of a pipe at the head of the Forty under such circumstances is of no help to those at the bottom and, on the contrary, is a hazard.

On the vertical wall across the head of the pitch, opposite the Keyhole, are two ideally placed rawlbolts from which ladders can be hung for a dry climb under most conditions. It is an easy matter to straddle across the short rift above the pot at this point and one hopes that all cavers will acquaint themselves with the technique. In itself this method does not entirely preclude the possibility of anyone finding the climb too difficult, but here once again parties in such a situation could do much more to help themselves.

A permanent pulley block has been fixed to the bar over Suicide's Leap, right above the pitch. This equipment would well repay inspection by everyone. Full instructions on its use in an emergency, have been posted by the M.R.O. in Main's Barn. How many visitors have really taken the trouble to study this notice, and to furnish themselves with the knowledge of tying a bosun's chair and rigging the hauling rope that is available? With the experience which comes of practice it is very probable that parties could do much to minimise the number of full-scale MRO call-outs. The knowledge of what to do in an emergency must be part of every caver's repertoire, as are all other techniques. If any club or group of members wishes to gain vital experience of emergency procedures in Swildons, or in other caves, they are welcome, through their Secretaries, to arrange for practices with MRO equipment and guidance. Some are doing this, but many more would find such exercises of extreme value - and fun!

#### Nancy Camel's Hole, Nr. Shepton Mallet

Keith Barber, Richard Witcombe and Dave Everett have recently obtained permission to dig this hole and report the prospects as promising. At present they are attacking a mud choke at the end of a well-defined 35 feet long passage. Towards the end of the last century the entrance fill was excavated for archaeological remains and the current dig has pushed well beyond the limits of the old workings.

Any members who are keen to lend a hand are welcome and should get in touch with Keith at 4 Catsash, Shepton Mallet, Somerset.

#### Jumble Sale. Help Required!

The previous club sale of jumble was an enormous financial and indeed social success. As reported earlier, the majority of items were taken back into store for another sale on Saturday 1st October at 2.45 p.m., in Wells Y.M.C.A. (Chamberlain St.).

The response of helpers for stalls and arrangements last time was very encouraging and it is hoped that as many members as possible will offer their services once again. Experience shows that a great deal depends upon the extent of local advertising to attract customers. The Autumn is a good time to have a sale and so the artists in the Club are asked whether they would like to draw up appropriate posters which might be displayed around Wells. Please send these to the Secretary before the end of September.

Unless you have any suitable clothing of specifically winter wear that you are prepared to donate it can be taken that we already possess sufficient in stock to make this sale another great success.

## New Members

We welcome the following new members to the Club, elected on 20.8.66:-

M.J. Baker, "Morello", Ash Lane, Wells, Somerset.  
E. Camburn, 10 Beach Road East, Portishead, Bristol.  
I. Jepson, 7 Shelley Rd., Beechen Cliff, Bath, Somerset.  
R.L. Penhale, 15 The Avenue, Chiswick, London W.4.  
Mrs. G.R. Penhale, 15 The Avenue, Chiswick, London W.4.  
Mrs. M. Hewins (Joint), 47 Legge Crescent, Aldershot, Hants.  
D.J. Tombs, 24 Ferndale Rd, Northville, Bristol 7.  
W.J.R. Willcocks, 3 Westview Drive, Twyford, Berks.

## G.B. Cave - Ladder Dig Extensions

The U.B.S.S, have now issued the following set of rules for parties who wish to enter the new Ladder Dig Extensions to G.B. Cave:-

"As from Sept, 1st 1966 these extensions will be open to member clubs of the O.C.C. and to their guests. There is a separate gate at the end of the Ladder Dig crawl for which separate keys are necessary. These may be obtained in the same way as for the G.B. keys themselves, but the following rules are necessary for the preservation of the Series, in addition to the G.B. regulations.

1) Due to the nature of the cave past the Ladder Dig, parties must be limited to a maximum of six (including the leader) and only one party (other than a UBSS party) is to be in the extensions at any one time. The members of each party must all be experienced cavers - all others are restricted to the main cave. (This will entail locking the separate gate after entry).

2) In order to preserve the formations, routes through Bat Passage and in Great Chamber have been marked with tape, and formations taped off. In Bat Passage (the terminal portion of the Series), the rule is to keep the tape on your right hand side on the way in where there is only one tape. Where there are two tapes, walk between them. Please keep to the set routes strictly. (It is so easy to desecrate the areas beyond the tapes, and as yet they are untouched). In Great Chamber there is no fixed route, but cavers should tread carefully as there are numerous formations all over the floor, on and between boulders. The main formations are taped off and you must not go between the tapes and the wall.

3) Again in the interests of preservation we ask that all cavers should use Nife cells only. In the event of someone having to resort to carbide he must carry with him a suitable container (plastic bag, spare lamp base, etc.) in which any spent carbide is to be taken out of the cave. No rubbish of any kind is to be left in the Series.

4) All side passages and parts of the cave off the normal route must be left unvisited. A microbiological study of untouched areas is under way and will take several years to come to completion.

We are setting down what we consider to be the minimum of rules to safeguard the Ladder Dig Series and its visitors. It is up to the individual clubs themselves, to see that they are observed. This system will work as long as you all observe the rules, but any breach by irresponsible minorities resulting in destruction of

formations, deposition of litter, etc., can only lead to a more complicated system for access.

If on any party no visit is to be made to the Ladder Dig Series club representatives are asked to note this on their application form so as to save unnecessary postage charges for themselves and UBSS. No additional tackle fee is required to visit the Series.

U.B.S.S. 1966."

### The Use of Club Tackle

It has been our aim for some time now to provide sufficient ladder, tethers, rope and other essential equipment at Hillgrove to enable different parties to visit most major Mendip caves at the same time if necessary. The remainder of our tackle is held in store by Phillip Davies. Over the past year, too, we have experimented with leaving the tackle unlocked in the shed, for we all know that a great deal of useful caving starts from on-the-spot arrangements amongst members who meet casually while in residence at the hut. This after all is one of the chief functions of the hut, in bringing members together to plan caving. The sense of this freer access to tackle is to be seen by anyone who cares to read of the many weekend, and even weekday, trips undertaken and written up in the Hut Log. Those from a distance who wish to reserve tackle for trips planned well ahead can do so through the Hut Bookings Officer when making accommodation arrangements.

The following items are kept in the tackle shed at Hillgrove: -

200 ft. of Ladder	2 X 120 ft. Rope
4 Tethers	2 X 60 ft. Rope
Maypole	Digging equipment

Any system is not without its problems, however, particularly when it is based largely upon the efficiency and general helpfulness of individuals. Nevertheless such problems are rare and are to be preferred in any event to those associated with restrictive controls. At the time of writing certain items of equipment have not been returned to the shed after use - tethers are a notable case in point. So it is necessary to ask members to make every effort to use the Club's tackle correctly and to ensure its safe return in good condition. This applies to the larger items as well as the smaller, easily lost ones, such as tethers.

The following points of procedure in borrowing Club Tackle are stressed:-

- 1) Always make a great effort to return tackle in a good condition as soon as possible after it has been used. A Log Book is provided in the Tackle Shed for signing all items out and in. Please use it, as it not only gives a check on who has what, but will also prove invaluable in establishing the useful working life of tackle.
- 2) Except in the case of official Club trips, party leaders must be responsible to the Club for the tackle they have borrowed. Unless any item lost or damaged is the result of unavoidable circumstances or fair wear and tear then the Club feels it must ask for compensation in money or in kind from those responsible. Like most things, the materials for making tackle are getting more and more expensive and it must be appreciated that the Club cannot always dig deeper into its pockets to make up for avoidable losses of equipment. This principle is not really severe when one considers that hitherto losses have been minimal and that for small premiums most parties could insure all their baggage, particularly on visits to other caving regions and abroad.

- 3) Anyone, or any party, wishing to borrow Club tackle for visits of a long duration; and away from Mendip, should contact the Tackle Warden or Phillip Davies as soon as their plans are known. Full details of the tackle required should be given, and granted sufficient notice has been given there is no reason why any reasonable requests should be refused. The tackle in such cases comes out of store.
- 4) Any defects, damages, or losses of tackle should be reported to the Tackle Warden, or any other Officer of the Club, as soon as they come to the attention of any member.

Most of the above points are quite obvious if we are to run our Club efficiently. They have been listed here to enable members to take the best advantage of all the equipment the club has to assist their caving.

### Tackle Inventory

1. Ladder 910 ft.  
This is Manufactured by the club in 10, 20, 40 ft. lengths. The bulk of the ladder is made with rungs of HT30WP aluminium alloy tube with dimensions of 1/2" O.D. x 10 swg. The wire side ropes are 15 cwt aero cable and the rungs are fastened by the Pinning Method, all the ladders are terminated by "C" links. However, ladders manufactured in the future will probably have the rungs fastened by the Pinned Epoxy Resin method.
2. Tethers 24  
Those are manufactured by the club in various lengths, in 15 cwt aero cable, terminated by 3/8" "C" links.
3. Scaling Pole 40 ft.  
This is made up of 10 x 4 ft. sections of aluminium alloy Scaffolding Pole complete with expanding type connectors.
4. Rope
  - a) Lifelining: 2 x 240 ft. 1 3/8" Nylon  
6 x 120 ft. 1 3/8" Nylon  
Polypropylene fibre rope has been investigated and has proved to be a worthy substitute for nylon. Any ropes purchased in the future will probably be of this material.
  - b) Digging: Various lengths of 1 1/2" and 2" circum. hemp and nylon.  
Lifelining ropes should never be used for boulder hauling etc. in digs.
5. Pulleys  
7 Lightweight, suitable for double lifelining, with ropes of up to 1 1/2" and 2" circ.  
5 Heavy pattern for digs.  
The lightweight pulleys must not be used for digs.

## CLUB MEETS

Weekend September 24th/25th South Wales Names to Paul Duck, 13 Goodymoor Avenue, Wells, Somerset.

Saturday October 1st St. Cuthberts Leader Nick Hart, Barberry House, Kingston Seymour, Nr. Clevedon, Somerset. Meet at the Belfry 3.0 p.m.

Jumble Sale in aid of Hut Fund. Wells Y.M.C.A., Chamberlain Street, 2.45 p.m.

Weekend October 8th/9th Aggy Aggy Names to Howard Kenney, Tudor Cottage, Beryl Lane, Wells.

Saturday October 15th Longwood/August Hole Leader Roy Staynings, 8 Fanshawe Road, Hengrove, Bristol 4. Meet at the Cave 3.0 p.m.

Thursday October 20th Talk by Bernard Woods on the last two years' trips to Balinka Pit in Jugoslavia by the South Wales Caving Club. 7.30 p.m. at the Boy Scout HQ, Waterloo Street, Christchurch, Clifton, Bristol.

Saturday October 22nd Annual General Meeting and Dinner  
Meeting: 3.0 p.m. Priddy Village Hall.  
Dinner: 7.30 for 8.0 p.m. Caveman Restaurant, Cheddar.

Hon. Secretary: J.D. Hanwell, "Chaumbey", 50 Wells Road, Wookey Hole, Wells, Somerset.  
(General Club Policy)

Hon. Asst. Secretary: L.M. Teasdale, 47 Camborne Road, Morden, Surrey.  
(Membership applications, cave keys, C.C.C. Permits)

Hon. Treasurer: Mrs. B. Surrall, 216 Evesham Road, Headless Cross, Redditch, Worcs.  
(Subscriptions, Accounts)

Editor: T.E. Reynolds, Yew Court, Pangbourne, Berks.  
(Journal Material)

Librarian: Dr. D.M.M. Thomson, "Pinkacre", Leigh-on-Mendip, Nr. Bath, Som.  
(Lending Library & Hillgrove Reference Library)

Hut Bookings: P.W. Duck, 13 Goodymoor Avenue, Wells, Somerset. Tel: Wells 2501  
(Hillgrove & Eastwater Bookings, Mendip tackle bookings)

Activities Secretary: C.R. Hobbis, Warren Lodge, Long Ashton, Bristol. Tel: Long Ashton 2127  
(Offers to lead trips, requests for trips).

Sales Officer: R.J. Staynings, 8 Fanshawe Road, Hengrove, Bristol 4.  
(Club Publications, badges, ties, lamp sets)

Survey Scheme: T.E. Reynolds, Yew Court, Pangbourne, Berks.  
(Enquiries and sales of cave surveys)

# THE THIRD WINTER AT RESERVOIR HOLE, CHEDDAR GORGE

W.I. Stanton

## Introduction

This article deals with the work following that described in Wessex Journal No.105 (March 1966), which had led to the discovery of the new "Moonmilk" Chamber and had proved that Holy Hole was only an oxbow. The places needing investigation were the floor of the middle rift and the floor of Moonmilk Chamber, whence issued the notorious draught. Reservoir being a comfortable winter dip, the operations began on Nov. 3rd 1965 and ended on April 20th 1966.

The dip was again mainly a Wessex one. There was considerable enthusiasm, as may be gauged from the total of 78 working trips in five and a half months. The most regular diggers were the author (69 visits), Will Edwards (33), Alan Tricky (12), Johnny Reay (11), Dick Hayle (19) and Richard Kenney (8), but there were many others representing clubs ranging from the Shepton through Severn Valley and the Mendip Caver to the Weston-super-Mare Flying Club.

## The Dig

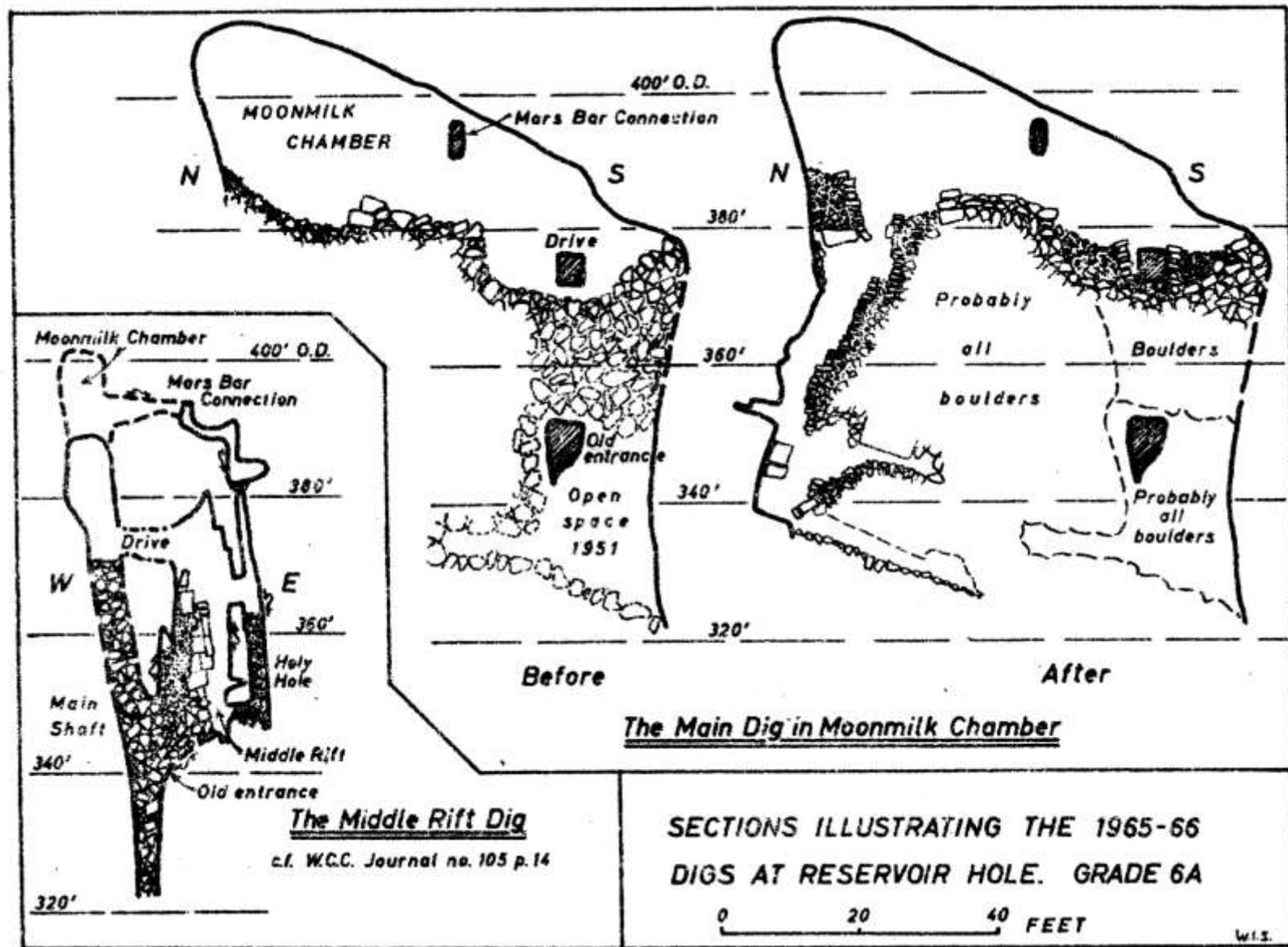
### (a) Middle Rift.

The middle rift (Fig.1) was attacked first as it was obviously a much smaller affair than the floor of Moonmilk Chamber. It was loosely choked with angular stones of all sizes, which were raised with the aid of rope, pulley and plastic buckets and tipped down Holy Hole. Only 2 of the 4 sides were solid and the other two had to be shored up by somewhat hazardous means which amounted to building dry stone walls from the top downwards. The final work at this dig was done by small suicidal bachelors.

It was found that the middle rift was a blocked off part of the channel through which water had left Main Shaft and Moonmilk Chamber. The blockage consisted of an enormous flake that had tilted away from the north wall. A foot or two below the low-level connection with Holy Hole the rift closes down to 4" wide, 19ft below the starting point of the dip. The little stream that flows down the entrance passage in very wet weather reaches this point, staining the stalagmite brown, and then runs away into Main Shaft. The dip is now abandoned and partly filled in.

### (b) The Main Dig.

Smoke tests in Moonmilk Chamber showed that the draught percolated up through the boulder floor at many places. We had penetrated 50' below floor level at the south end in 1951 and had lost the draught, so we now attacked a low point where the rift was about 4' wide, 15' from the north end.



The Middle Rift Dig

c.f. W.C.C. Journal no. 105 p.14

The Main Dig in Moonmilk Chamber

SECTION ILLUSTRATING THE 1965-66 DIGS AT RESERVOIR HOLE. GRADE 6A

0 20 40 FEET

W.S.

By good fortune after only 2 days work we entered a fair-sized open space below a huge jammed boulder, giving access to the rather shattered north end of the rift. Now it was possible to dig down with more or less solid walls on 3 sides. The excavated material was breakdown comprising angular rocks and stones of all sizes, with a small proportion of earth that had apparently seeped in from the Gorge through narrow fissures. Throughout large zones, especially near the north end of the rift, the debris was bound together by thick white moonmilk like cream cheese. The south wall had to be shored up using 3 railway sleepers jammed across the rift; as this widened to 6' downwards the job was not easy.

Since the shaft was only about 50' from, and slightly lower than, the waterworks reservoir in the Gorge we dared not use explosives, although these were often much to be desired. Instead all large rocks were broken with Luke Devenish's 201b. sledgehammer, including one as big as a piano that took 2 days to smash. Among the debris were several fallen stalagmite slabs and bosses of great size, and these more than any other rock type defied the hammer.

The north end of the rift was found to be undercut at an angle of about 20° off vertical, allowing the south shored wall to be constructed at the same angle. At 20' down the strongly jointed north and east walls were unstable, and although we made the shaft smaller a huge joint slab peeled off the east wall and the adjacent digger was lucky to escape squashing. A railway sleeper and three 5' lengths of railway track were used to restore the situation. The shattering at this end of Moonmilk Chamber is especially strong and may be partly due to frost action since only some 15' of rock intervene between it and the cliff outside - the external bank of scree having accumulated since the end of the Ice Age.

At 30' down the rift narrowed to less than 3' and a group of jammed boulders up to grand piano size formed a reasonably secure roof to an open space extending 15' southwards from the north wall. This was lucky, for 3' lower down the rift suddenly widened to 5' due to breakdown of the west wall. At 44' down a sloping solid rock floor appeared at the north end, but to everyone's relief it only extended 4' southwards before breaking away again. From this point we were able to squeeze between unstable boulders and enter a sort of passage 3' wide and 27' long under an overhang on the west wall. One wall and the roof were solid, the other wall and the floor consisted of the boulders and scree filling the rift. As usual the draught percolated up through the floor. This, 54' below the starting point was the lowest level reached in the dig. Working it through the unstable entry was impossible, so a new shaft was begun through the boulders 10' higher up. Shortly afterwards the dig was suspended due to the approach of spring and the author's departure overseas.

The mechanics of the dig -were simple. Bucketloads were raised in two stages using pulleys at the top and 25' down. The debris was mostly tipped at the south end of Moonmilk Chamber, where a dry stone retaining wall had to be built to protect the way out. Another dry stone wall 22' high was built to support the south side of the shaft more effectively; however the bottom of this wall is not very secure and needs concreting.

## Results

Moonmilk Chamber has been revealed as a rift chamber at least 90' high, more than two-thirds filled with breakdown derived from roof and walls. Water entered it below the deepest point reached in the dig and left it via two passages; the main route including the middle rift, and the smaller "Mars Bar Connection", finally vanishing into the southern passage. This development apparently took place when the water table stood at about 400' O.D., this being the approximate altitude of the pre-collapse ceiling of Moonmilk Chamber and of a sudden downward expansion of the entrance passage at the Second Squeeze. The narrower, upper portion of the entrance passage is presumably an earlier feature seized upon by the stream.

## Future Work

The source of the draught remains undiscovered, although it seems to enter the cave through the same passage as the water once did. It exerts a peculiar pull on the diggers, who will certainly be back there at the first opportunity. Meanwhile visitors should treat the dry stone walling with caution.

## Acknowledgements

The diggers are indebted to Mr. Gerald Robertson, manager of the Cheddar Caves, and to the Bristol Water Works Company, for permission to enter and work in the cave.

\*\*\*\*\*

## MENDIP NOTES

### Cheramodytes

#### The Turkey Expedition

Mike Holland and Bob Gannicott have turned up again on Mendip. They opened a barrel for us at the Hunters on the 3rd September. They got back from Turkey the day before, Mike with his hair rather short. Bob with a very fetching two-toned beard. They had been away six weeks, of which four were in Turkey. They were in the Taurus Mountains, which are in the S.W. of the country, not the E., so that we need not have been worried about the effects of earthquakes.

They explored ten caves, the most interesting of which was in Dumanti Gorge. Here there is a resurgence with about 2000 times the outflow of Cheddar, so that it was impossible to follow the stream passage. Some high level galleries were rather disappointing.

Further down the Gorge they found a smaller cave at the bottom of which was a large sump with very clear running water. Mike Jeanmaire, Bob Gannicott and Tim Gilbert all dived this. The sump is in a large passage about 20 ft. in diameter. After about 30 ft. one climbs up the right-hand wall into a small open passage, which leads into a large chamber. Another sump was found leading off this, and Mike Jeanmaire dived this to a depth of 40ft., after which it became impenetrable.

#### And to the Pyrenees

Jim Giles, Gary Pilkington, Carl Pickstone, Tim Reynolds and Tim Atkinson went to look at the caves they found last year in the Cirque de Lez in Arriege. It was very cold and very wet, with rather more snow than they had a right to expect for July. The Cirque de Lez is more famous for the Grotte de la Cigalere, but this Wessex party wanted to study the Grotte de la Resurgence de Benthailou. A grade 1 sketch of this was published in this Journal, Vol. 9, p.11, 1966. Last year they forced their way to beyond the stalagmite choke, which had stopped the French. This year they explored and surveyed about 1000 ft. of passages, the most remarkable feature in which was a lofty aven, over 90 ft. high. They only had 20 ft. of maypole and did not find any ledges, so further exploration of this, and of several chokes they found, must wait for another season. They established useful contacts with the French and Belgian cavers, who are working in la Cigalere. This cave is closed for biological and other scientific study. Their contacts with marauding sheep and cows were not so happy, as these animals had a flattening effect on tents. However, Gary Pilkington employed the "blunt northerner" technique on the sheep, which made them vanish for good over the mountainside.

#### And to Yugoslavia

Gary hitched from Toulouse to Yugoslavia. It took him six days. He says the caves there are really fantastic in dimensions. The first pitch he did in Yugo was a 225 footer.

This is very much the season for caving in foreign parts. The much heralded expedition of the South Italians to Yugoslavia started on July 30th from Penwyllt. Mrs. Price came and blew a whistle and waved a Welsh Dragon flag, but there must have been something wrong with the spell, because the bus came to a halt at the bottom of the hill, with a crack right through its clutch plate. However, replacements were fitted in two days and they got away all right.

### And Ireland

Ireland always attracts numbers of cavers now, but most of the parties from Mendip this year found the weather too good and the Guinness too attractive. Poulmagollum (Slieve Elva) is still officially closed to cavers, but darkness and fog are useful allies. There seems to be some difference of opinion between Cosgrove and Costello his neighbour, since in fact the main pothole lies between their two properties. Cosgrove says "no", but Costello says "yes, provided you enter by the north side." One of the Mendip clubs tried this, but some hard words resulted. However, if you don't mind a long walk, you can always get in through Poll Elva. Whether you can get out again is another matter. The South Wilians last year had an unpleasant experience there with flood waters. The link between the two caves fairly easily submerges. Moreover now that the foresters have furrowed the mountainside for drainage the run off is very rapid, and flooding takes place with uncomfortable rapidity.

### Longwood and August Hole

Tim Atkinson has also been busy nearer home. For some time he has been carrying out a geological and hydrological study of Longwood and August Hole. Using fluorescein and activated charcoal he finds that the water in the left hand stream in Wet Gallery discharges in both waterfalls in Stream Gallery, and also in the trickle entering Dry Gallery, from a fault on the left 100 ft. above the stream gallery junction. This, he says, indicates extensive bedding plane penetration in this area.

On 21.8.66 he and other members maypoled up into the roof of the great rift in August Hole. At the upper end of this there is a passage, which closes down after a short way. It is not worth pursuing, as it can only connect with the grottoes off Fault Chamber. But it is of theoretical interest, because it had to be there. It is part of the old drainage system which we meet at the lower end of the great rift in the oxbow. Tim rightly stresses something we are in danger of forgetting, that the place to dig is the lower end of the oxbow.

Nevertheless digging and banging proceeds elsewhere. Jim Giles and his merry men have been working at the main stream sink since 21.5.66 and have pushed it about 15 ft. Nearly 20 lbs of plaster gel have been used. They are now turning their attention to the rift at the bottom of Reynolds Passage.

## Fairman's Folly

Denis Warburton described this to me as "one of the most interesting of the hopeless digs on Mendip". It is in a field about half a mile east of the Miners' Arms, Work began on 23.4.66. It is very wet and the soil consists of boulders and mud. This may extend to a depth of up to 80 ft., so the geologists say, of which about 15 have been done. Shoring is the main problem.

## Halfpenny Hole

This cave (NGR 507554) is near Velvet Bottom. You leave the road where it sweeps across the valley in a curve and walk up to a clump of trees just south of the Charterhouse Mineries. The cave is just beyond that in a dry valley. In these valleys there are many holes, mostly mines, but this one seems to be natural. It was found on 23.7.66 and was named by Tony Dingle from a Georgian halfpenny found there. The small entrance at the foot of the bluff in the valley side was widened to a bedding crawl which forks. A good deal of digging and banging has been done since then, particularly by John Cornwell, who regards the dig as promising.

John is also digging at the lower end of Gour Rift in St. Cuthbert's and has diverted the stream for this purpose.

## David Lafferty

The record established by David of 130 days underground by himself in Gough's cave is no longer news, but the event has yielded more material of scientific interest than might have been expected. This kind of "recorditis" has always seemed to me a bit of a stunt, but it has provided an opportunity to study disturbances in biological rhythms. To us the most obvious rhythm is that of waking up and going to sleep, which is done by a sort of internal clock. This clock is wound up and kept accurate by various external stimuli, light and darkness, breakfast, the row going on next door. But isolated in a cave these external stimuli are removed. The result is that the internal clock slowly runs down. Over the weeks he awoke later and later, so that his estimate of the days passing was short of actuality, and he was surprised to hear that he had beaten the record when the time came. It was the same with Siffre and Workman.

But to the physiologists there are other biological rhythms equally interesting, particularly those concerned with the excretion of certain substances. Prof. J.N. Mills of the University of Manchester carried out a number of investigations on Lafferty with regard to these, but, so he tells me, he would have been able to do much more if he had started them before Lafferty went down the cave in the first place. So if anyone else wants to spend 3 months down a cave, would they be so kind as to let Prof. Mills know before they start?

### Kingsdale Master Gave

A news item comes to us from Alan Fincham, one of our older members. Working as he does in the University of Leeds, he is particularly interested in the activities of the members of their Speleo Association. On 11.6.66 these people forced the terminal chamber of Swinsto-Simpson's Pot. The chief pushers were Alan and Dave Brook who examined the boulder choke in detail and with energy. A low crawl below the boulders leads into a large stream passage (30 x 10 ft.), which drains Yordas, Jingle Pot, Rowten Pot, Simpson's and Swinsto Caves, and has therefore been called the Kingsdale Master Cave.

In the downstream direction, towards Keld Head, a large sump has been encountered, and upstream the Rowten stream enters through a 60 ft. long sump. This sump was first dived on 2.7.66 by Bill Frakes and other members of the Northern Section of the Cave Diving Group. Since then it has been dived on a number of occasions and the round trip Rowten - Simpson's has been done. By the end of August nearly 8,000 feet of new cave had been surveyed, and we expect the University of Leeds Speleo Association will publish their results.

### The Hunters New Look

Mendippers returning from abroad early in August can be forgiven for not recognizing the Hunters' Lodge Inn. The bar has been made longer and is served from what used to be the corridor. The room where the B.E.C. used to sing rude songs is now a smaller and more select bar with a carpet on the floor and no piano. The left hand room and the old bar are thrown into one, right to the back of the house. This provides a pleasant ingle-nook where once the barrels rested. The formerly private sitting room with the telephone opposite has been turned into a bar for the rowdier cavers. I didn't know where I was, until they put the corn dollies back on the mantelpiece.

## DIVING IN AGEN ALLWEDD

M.J. Wooding.

It is only fair that Agen Allwedd as the most extensive cave system in the country should attract the attentions of the cave diving fraternity. The main downstream sump was attacked in April 1983 by Steve Wynne-Roberts and Fred Davies. This ambitious operation involved portage of weights and equipment down the notorious Southern Stream Passage by members of C.S.S., B.S.A., and W.C.C. The divers who were using oxygen kits progressed about 150 feet before being stopped by an underwater pothole. This caused some consternation, as they were weighted for bottom walking and in fact Wynne-Roberts nearly fell into the pot.

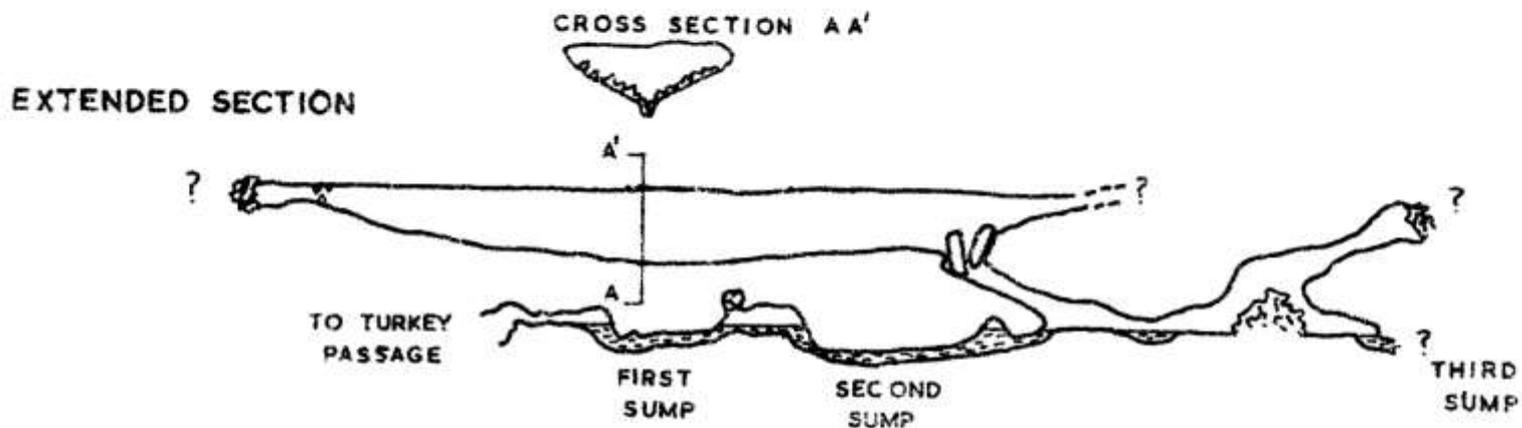
The other promising site was Turkey Sump, about 2 miles away in the cave from Terminal Sump. In March of this year the author was participating in a Wessex trip to Summertime series which was coerced into visiting Turkey Sump en route. He took the opportunity of probing the sump without kit and Phil Davies was kind enough to tend the lifeline. After an awkward crawl to reach the sump the passage disappears underwater in a dark clear rift. After several dives it was realised that the sump was far from simple, dropping into a chamber then twisting to the left to join a passage parallel to the original rift. The way on could be seen and a satisfied diver returned to the more mundane business of caving.

In May a trip was arranged by John Sinclair and the author with the assistance of members of Manchester group B.S.A. for the carry-in of equipment. Turkey Sump fell in 15 seconds flat as John led through at a high rate of knots. The two divers were soon reunited in a chamber containing thigh deep water, and splashed round the corner to be met inevitably, by another sump. John prospected the entrance to this in poor visibility and reported a pothole with no passages off in the upper 10 feet. The author then swam aimlessly around in the pot and suddenly found his head in clear water. After a second's pause to decide exactly where the passage continued, he finned rapidly along the passage, accelerating to keep ahead of the huge mud cloud he imagined was following him. The round smooth walled passage rose gently ahead and the depth gauge registered first 10' then 7' then 5' when the lifeline snapped taut with infuriating finality. By holding the line in one hand stretched behind him he was just able to raise his head above water in a chamber before being pulled back into the sump by the elasticity of the line. On return to advance base the divers exercised their age-old prerogative to curtail activities on the grounds of bodily cold, and returned through Turkey Sump to begin the long carry-out of equipment.

The sequel to these dives occurred in June when John Sinclair, Dave Roberts and the author returned to Turkey Sump aided by a vast team of sherpas from B.S.A., Chelsea S.S. and Happy Wanderers C.P.C. The three divers were soon in the first chamber and attaching more line for the attempt to extend the second sump. The author was generously offered first dive and swam quickly to the bell previously reached.

# AGEN ALLWEDD

## TURKEY SUMP



0 100'

C. R. G. GRADE I  
SURVEY BY THE CAVE  
DIVING GROUP  
14 JUNE 1966

A glance around confirmed that there were no ways on above water and he submerged again. After a further 15 feet he surfaced in open passage and belayed the line for the others. The lure of virgin cave was great and in a short while the party was tiptoeing upstream, the pebble floor biting into thin neoprene socks. After wading through a wide pool and squeezing through boulders the divers followed the stream a short way to yet another sump. This was left for another trip and attention was turned first to a boulder choke in the roof, which did not appear promising, then to a steep sandy passage leading back over the second sump. This led, via huge unstable boulders, to a big chamber with chokes at each end and containing some exquisite formations.

There is little doubt that further digging and diving trips will yield rich rewards.

\*\*\*\*\*

### BOOK REVIEWS

Leuchtende Finsternis by Alfred Bögli and Herbert W. Franke.

91 pages of text and 72 plates 10¾" x 8¾". Published by Kümmerly and Frey, Geographical Publishers, Bern. Autumn 1965 at 29 DM (Approx. £2.12.0d.) in French and German Editions. English Edition coming out later this year.

---

From its white leather spine, with gold lettering and glossy picture of glowing stalactite curtains on the front cover, through all its 160 pages of text and illustrations, printed on fine quality paper to the picture of an underground river on the back cover, Leuchtende Finsternis (Shining Darkness) is indeed a shining example of what a well written, well-illustrated, and well produced speleological work should be.

The text is a very concise introduction to caves, cave exploring and cave science. The book also touches on that most complex of subjects, the formation of caves. Needless to say in a work containing such a magnificent display of cave photographs, this facet of speleology is also expounded upon.

The joint authors show a total of 40 colour and 32 black and white photographs, each worthy of merit in its own sphere, a selection of the very best photographs of the underground world. All the photographs are of continental caves, in Austria, Jugoslavia, Germany, France and Switzerland. Not only scientific photographs have been included. Sporting caves are also illustrated, crawling along passages, coiling up a most muddy caving ladder and even a group enjoying an underground snack.

This is a book which will appeal to both the caver and the laymen, especially to the latter who, after

seeing in comfort some of the subterranean marvels, will be able to understand just why people go caving. A.D.O.

The Transactions of the Cave Research Group of Great Britain.

Vol. 7. No. 2. Edited by Dr. T.D. Ford 10 x 8 March 1966. 208 pp. 18 plates 26 figures (From Inett Homes, Lindum, The Homend, Ledbury, Herefordshire. Price to non-members 30/-).

---

The latest C.R.G. Transaction is of an admirably high standard as regards content, continuing the trend started by Picknett's article in Vol. 7 No. 1. The format of 'Transactions' is well suited to the serious scientific nature of the type of article now appearing, and it is to be hoped that the standard will be maintained in the future.

This volume contains 5 articles, 3 written jointly by Ford (concerning the Golconda caverns, new caves at Breedon-on-the-Hill, and the cave fauna of the Portland district) also the two main articles:- "Scallops and Flutes" by Curl and "The Analysis of Flow Data from Karst Drainage Systems" by Ashton. Both of these are important original works.

Dr. Curl starts with an introduction to the past work done on scalloping, and of necessity confuses British readers with his definition of fluting as transverse grooving instead of the streamwise feature understood by those who use Maxson as a standard reference. Nevertheless there is no reason why the author's nomenclature should not gradually be accepted, despite the past confusion over terminology in this particular branch of geomorphology. He goes on to a theoretical analysis of the formation and equilibrium of the flute, using in the process basic fluid and chemical engineering theory. By dimensional, and by geometrical considerations he establishes that under certain conditions flutes form, with a period inversely proportional to the mean channel flow velocity, and with strictly similar profiles. There follows an interesting account of an attempt to test practically the mass transfer properties of a stable flute profile. Altogether this is certainly the most definitive writing on the subject to date.

The article "The Analysis of Flow Data from Karst Drainage Systems" by Dr. Ashton describes a theoretical analysis of the passage of flood waves or pulses through a cave system. By correlating the pattern of pulses at the resurgence with the variation with time of Turbidity, pH, Hardness and Temperature, the author postulates the possibility of deducing the nature of the cave system. He explains the effect of sending pulses down simple and complex model networks and shows how the efflux flow graph which results can be expressed in mathematical notation, in a single binary number. Once the reader has grasped this he may follow the arguments of synthesis and analysis which make it possible for the researcher to pick up the water flow records for a resurgence and write down the probable form of the cave system. An example is given of the analysis of the Kolmo's system. The author, in a liberal minded and far sighted concluding section, emphasises among other things that his work is not intended to be conclusive, but the reader will surely feel that this is an important and comprehensive addition to the literature of geohydrology. Would it be out of place to hope that Dr. Ashton will do further work on the subject including perhaps a

computer programme which could be used by non-specialist workers. Unfortunately the text is marred by a number of small mistakes, but these will be noticed by readers following the working closely.

M.W.

Derbyshire Caving Association Newsletter, Jan. 1966 19 pp, photographs cartoons, price 1/0. from John Garratt, Mount Lofty, Dale Ave., Mapperley, Nottingham.

---

The new D.C.A. Newsletter puts the Wessex Journal to shame. The D.C.A. have printed their newsletter using the off-set litho method with reduced type format, giving a very crisp professional appearance. At one shilling it is fantastic value for money, especially in view of the photographs both on the cover and inside.

Most of the newsletter is taken up with Derbyshire topics, cave gates etc., but of more general interest is a caving write-up of the Carlswalk rescue. A boy soldier free dived a 120 ft. long sump and sat for 13 hours until his rescuers had pumped out most of the water to free him.

Dr. Trevor Ford has written the first of seven instalments of The Limestones of Derbyshire, I do not think that the gap between geologists and speleologists is quite as large as Dr. Ford likes to make out, but his article is interesting, up-to-date and well worth reading.

A.D.O.

Oxford University Expedition to Northern Spain 1961 by members of the Expedition Publication 0.14. The Cave Research Group November 1965, 42 pp. surveys, photographs etc. at 15/0. (12/6. to Wessex members) from "Upleadon", Trumpet, Ledbury, Herefordshire.

---

The most striking point about this publication is the new binding. Gone are the staples that pulled through the cover when the book was first opened. These have been replaced by a glued linen strip, allowing the book to lie flat when open.

The Oxford University went to the Picos de Europa in a big way. Two well loaded Bedford ex-Army trucks and a team of twelve, surveying, photographing and water sampling as they went. Consequently, they have plenty to show for their two month expedition.

Individual members present reports on their own particular responsibilities e.g. Transport, Catering, Miscellaneous Supplies, Domestic Organisation, Photography, Water Analysis and Hydrology, Geomorphology and Geophysical Survey etc. The Report is concluded with three pages on the 1962 and 1963 expeditions to the same area.

A.D.O.

WESSEX CAVE CLUB

MEMBERSHIP LIST 1965/66

ACLAND, E.F.D., Royal Agricultural College, Cirencester, Glos.  
ALDER, J.C.H., 257 Olton Blvd. East, Acocks Green, Birmingham 27.  
APPLEYARD, I.A., 19 "Milestones", Park Lane, Bath, Som.  
ASH, Mr. & Mrs. A.G., 86 Fernbank Road, Ascot, Berks.  
ASHWORTH, H.W.W., 9 Lucas Close, West Town Lane, Bristol 4.  
ATKINSON, T., Churchill Hall, Stoke Bishop, Bristol 9.  
ATWOOD, H.C., 155 Goddard Avenue, Swindon, Wilts.

BAKER, Mr. & Mrs. K.F., 8 Milton Close, Sutton, Surrey.  
BALCOMBE, F.G., 143 Newgate Street Road, Goffs Oak, Waltham Cross, Herts.  
BANKS, Fig. Off., R.L., Officers Mess, R.A.F., Abingdon, Berks.  
BARBER, K.E., 4 Catsash, Shepton Mallet, Som.  
BARRINGTON, N.R., "The Oak House", The Square, Axbridge, Som.  
BARRON, H.D., 92 Wilton Road, Shirley, Southampton.  
BARWICK, A.D., 8 Kings Road, Haslemere, Surrey.  
BATEMAN, C.M., 102 Sydney Place, Bath.  
BEAUCHAMP, C.A.J., 65 Coombe Lane, Raynes Park, London S.W.20.  
BENHAM, J.A., 90 Elsdon Road, Wellingborough, Northants.  
BENNETT, V.L., 6 Wellington Lane, Heath End, Farnham, Surrey.  
BERRILL, Mr. & Mrs. R.W., 8 Priory Gardens, Corbridge, Northumberland.  
BERRY, D.J., 1 York Place, St. Augustines, Bristol 1.  
BIGNELL, R., 101 Kensale Road, Knowle, Bristol 4.  
BIRD, M.B., 159 Grove Hall Court, Hall Road, London N.W.8  
BOLT, G., The Stores, Shepton Montague, Wincanton, Som.  
BOOTH, P.M., 35 Cairns Road, Crosspool, Sheffield.  
BRIDGES, Mr. & Mrs. L.C., 62 Wentworth Road, Barnet, Herts.  
BRIDLE, R., 67 Cleevemount Road, Cheltenham, Glos.  
BROOKER, W.F.R., 2 Cradle Lane, Frith End, Bordon, Hants.  
BROWN, G.J., 15 Charlotte Street, Bath, Som.  
BROWN, H.B., 7 Kinsale Road, Bristol 4.  
BRYANT, D.C. Glyncoed, Victoria Rd, Maesycwmmer, Hengoed, Glamorgan.  
BHZANT, Mr. & Mrs. T.G., Glyncoed, Victoria Rd, Maesycwmmer, Hengoed, Glam.  
BULGIN, R.H.C., 12 Cleveland Street, Taunton, Som.  
BURLETON, A.S., 27 Doncaster Road, Southmead, Bristol.  
BURNETT, J.M., The Bungalow, 1 New Ridley, Stocksfield, Northumberland.  
BURT, P.E., 3 Manor House, Rothamstead, Harpenden, Herts.

CALVERT, J.M., City of Worcester Training College, Henwick Grove, Worcester.  
CANDY, G.J., 10811-135 St., Edmonton, Alberta, Canada.  
CARLTON, J.K., 10 Eton Court, Pemburly Avenue, Bedford.  
GASTERET, N., Castel Mourlon, St. Gaudens, Garrone, France.  
CAUSER, Mr. & Mrs. D.J. 19 Kenmore Crescent, Filton Park, Bristol 7.  
CAUSER, S., 19 Kenmore Crescent, Filton Park, Bristol 7.  
CHALKER, J.L., 7 Saville Row, Bath, Som.  
CHARD, T.H., Moorland Farm, Axbridge, Som.  
CHARLES, P.H. 14 St. Augustine's Rd, Edgbaston, Birmingham 16.

CHURCH, J.R., 35 Rayens Cross Road, Long Ashton, Bristol.  
 CLARK, Miss B.J., 25 Belfield Road, Didsbury, Manchester 20.  
 CLARKE, A.G., 221 Grosvenor Crescent, Hillingdon, Middx.  
 CLEAVE, F.O. & Mrs. N.H.L.W., 2 Aspen Close, Nth. Colerne, Chippenham, Wilts.  
 CLEAVER, R., 58 Malvern Road, St. George, Bristol 5.  
 COLL, J.A., 16 Leaside Avenue, London N.10.  
 COOK, D.J., "Fairway", School Lane, Woolavington, Bridgwater, Som.  
 COOPER, Dr. N.C., Strathmore, Winscombe, Som.  
 COPPINS, R.H., 125 Richmond Rd., Montpelier, Bristol 6.  
 CORNWELL, J., 419 Whitehall Road, Bristol 5.  
 COUSINS, P.R., 3 Kinver Road, Sydenham, London S.E.26.  
 CRAGO, Miss A., 53 Fairfield Road, Taunton, Som.  
 CROOK, Dr. B.A., The Laurels, Timsbury, Som.  
 CULLINGFORD, Rev. C.H.D., "Lilburn", Hickman's Road, Godstone, Surrey.

DANDO, P., 47 Broadfield Road, Knowle, Bristol 4.  
 DARBON, F.G., 43 Arthur Henderson House, Fulham Road, London S.W.6.  
 DAVIES, P., "Morley", Silver St., Nailsea, Bristol.  
 DAVIES, Mrs. P., "Morley", Silver St., Nailsea, Bristol.  
 DAVIES, Prof. R.E., Dept. of Biochemistry, School of Medicine, University of Pennsylvania, Philadelphia, PA, U.S.A.  
 DAVIS, Miss P.M., 410 Wells Road, Knowle, Bristol 4.  
 DAWE, K., "Rosinis", Southwick Road, Mark, Nr. Highbridge, Som.  
 DESBOROUGH, M.R., 15 Vest Ave., Burton Latimer, Kettering, Northants.  
 DEVENISH, Mr. & Mrs. L.W.E., Washingpool, Chilcote, E. Hornington, Wells.  
 DEWDNEY-YORK, M.W., Y.M.C.A., Parkside Road, Reading, Berks.  
 DINGLE, A.E., 107 Waverley Road, Stoneleigh, Epsom, Surrey.  
 DOBSON-HINTON, Mrs. D.P., c/o Mrs. J.M.C. Scott, 3 Richmond Rd, Cambridge.  
 DREW, D.P., 25 Cromwell Road, Bristol 6.  
 DUBOIS, D.A., "Holly Cottage", Edwin Rd., West Horsley, Surrey.  
 DUCK, A., c/o Mrs. Preece, 111 Hucclecote Rd., Gloucester.  
 DUCK, J.W. 70 Queens Road, Bristol 3.  
 DUCK, P.W., 13 Goodymoor Ave., Wells, Som.

EDWARDS, D.J., 73 Harcourt Road, Redland, Bristol 6.  
 EDWARDS, W., 91 Rookery Road, Knowle, Bristol 4.  
 EVANS, D. G., 44 Knollys Rd., Streatham, S.W.16.  
 EVERETT, D.G., 133 Galpins Road, Thornton Heath, Surrey.

FARR, Lt. D.N., 8 Churchward Avenue, Preston, Weymouth, Dorset.  
 FERRIS, G.M., 13 Haverstock Rd, Knowle, Bristol 4.  
 FINCHAM, A, 6 Park Road, Rawdon, Nr. Leeds,  
 FORD, Dr. & Mrs. D.C., Dept. of Geography, McMaster University, Hamilton, Ontario, Canada.  
 FORTE, P.D., 8 Bryony Hse., Jocks Lane, Bracknell, Berks.  
 FOX, J.W. 22 Vernon Rd., Edgbaston, Birmingham 16.  
 FRAME, Mr. & Mrs. J.W., Two Chimneys, Bushcombe Lane, Woodmancote, Cheltenham.  
 FROST, Mr. & Mrs. F.W., 71 Hazelbury Road, Knowle, Bristol 4.  
 FUSSELL, W.J., 67 Swiss Drive, Ashton Vale, Bristol 3.

GALVIN, M.B., 2 Water Lane, Watford, Herts.

GANNICOTT, R.A., 52 West Town Lane, Bristol 4.  
GIBBS, P.D. 40 Hollywood Road, Brislington, Bristol 4.  
GILBERT, T., "Rydal Mount", Heath Road, Weybridge, Surrey.  
GILES, P.M., GPO's Mess, R.N.A.S., Yeovilton, Yeovil, Som.  
GLENNIE, Brig. E.A., Seaton House, Shrublands Rd., Berkhamsted, Herts.  
GODDEN, S.D., 56 Harcourt Rd, Redland, Bristol 6.  
GOSLING, J.G., 63 Northville Road, Northville, Bristol.  
GOVERD, K.A., 101 Westleigh Park, Hengrove, Bristol 4.  
GRAHAM, A.C., 4 Lymington Close, Norbury, London S.W.16.  
GRANT, D.E., 23 Cuthburga Rd., Wimborne Minster, Dorset.  
GREGORY, J., 94 High Street, Maylwich, Essex.  
GULLY, A.M., 29 Eastfield, Westbury-on-Trym, Bristol.  
GUMBLETON, D.P.W., The Lodge, Barrow Court, Galhampton, Yeovil, Som.  
GURNETT, C.H., 1 Rosecroft, High St., Southgate, London N.14.

HALE, R.A., 13 South View, East Horrington, Wells, Som.  
HALL, T., 41 Chapel St. East St. Kilda, Melbourne, Victoria, Australia.  
HAND, G.R., 21 Arne Crescent, Parkstone, Poole, Dorset.  
HANWELL, Mr. & Mrs. J.D., Chaumbey, 50 Wells Rd., Wookey Hole, Wells, Som.  
HARDCASTLE, M.E., 44 Canynge Rd., Clifton, Bristol 8.  
HARDING, R., 34 Taunton Lane, Old Coulsdon, Surrey.  
HARRIS, C.W., Harris & Harris, Market Place, Wells, Som.  
HARRIS, P.K., Dene House, 9 Dene Road, Whitchurch, Bristol 4.  
HARRISON, M.J., 13 Maltdown Road, Evercreech, Shepton Mallet, Som.  
HARRISON, W.G., 9 Carlin Craig, Kinghorn, Fife.  
HART, N.J., Barberry House, Kingston Seymour, Nr. Clevedon, Som.  
HARVEY, B.E., 114 Park Road, Stapleton, Bristol.  
HAWKES, Mr. & Mrs. C.J., 147 Evington Lane, Leicester.  
HEMMINGS, A.S., Trysgol, Abergwesyn, Llanwrtyd Wells, Breconshire.  
HENSLER, E., "Gilead Balm", 12 Knighton Close, Woodford. Green, Essex.  
HEWINS, M.A.H., 51 Roman Way, Farnham, Surrey.  
HOBBIS, C.R., Warren Lodge, Long Ashton, Bristol.  
HOBBBS, D.P.S., Rookery Cottage, Sutton Veny, Warminster, Wilts.  
HOBDAY, F.J., 28 Haywards Road, Haywards Heath, Sussex.  
HOLLAND, L., c/o Reactor Physics Dept., The University, Birmingham 15.  
HOLLAND, M.J., 83 East London St., Edinburgh 1.  
HOOPER, Mr. & Mrs. J.H.D., 34 Richmond Road, Staines, Middx.  
HOOPER, M.L., 6 Marbeck Road, Westbury-on-Trym, Bristol.  
HOUSTON, B.C., 4 Donald Road, Uplands, Bristol 3.  
HUCKER, F.C., Penniless Porch, Wells, Som.  
HUGHES, R.F.F., 51 Sandown Road, Bristol 4.  
HURWORTH, A., 74 Manor Haigh Road, Lupset, Wakefield, Yorks.

ILES, Mr. & Mrs. C.J., Corner Cottage, Bussex, Westonzoyland, Bridgwater, Som.

JOHNSON, J.R. 1 Churchill Close, Wells, Som.  
JONES, C., 4 The Grove, Wraxall, Bristol.  
JONES, G.W., 3 Upjohn Crescent, Hartcliffe, Bristol 3.  
JONES, J.H., 26a Pant Morfa, Porthcawl, Glam.  
JONES, U., Marsh Farm, Asham-in-Furness, Lancs.

KEMP, D., 5 Church Lane, Southwick, Brighton, Sussex.  
KENNEY, Mr. & Mrs. C.H., Tudor Cottage, Beryl Lane, Wells, Som.  
KENNEY, R.R., "Yennek", St. Mary's Rd., Meare, Glastonbury, Som.  
KENT, Mr. & Mrs. L.J., Fisherman's Hut, Yarlinton, Wincanton, Som.  
KINSLOW, Mr. & Mrs. P.R., 39 Sedgemoor Road, Foxhill, Bath.  
KINSMAN, D.J., 24 Linden Lane, Princeton, New Jersey, U.S.A.  
KNIGHT, J.A., Highbridge Cottage, Highbridge Green, Bishopsworth, Bristol.

LAKIN, G.R., 163 Falcon Lodge Crescent, Sutton Coldfield, Warwicks.  
LAMB, Rev. P.F.C., The Vicarage, Winkleigh, N. Devon.  
LANDEG, D.J., 39 Tonbridge Crescent, Kenton, Middx.  
LANE, Mr. & Mrs. M.J., 49 Langdale Road, Market Weighton, Yorks.  
LASCELLES, R., Rush Common House, Abingdon, Berks.  
LAWDER, Com. & Mrs. P.B., Brook House, Wrington, Bristol.  
LAWDER, Major & Mrs. R.E., Rectory Cottage, Halstead, Sevenoaks, Kent.  
LEIGH, D.L., 97 Hassocks Road, Streatham, London S.W.16.  
LLOYD, E.G., 31 Boston Road, Hanwell, London W.7.  
LLOYD, Dr. O.C., Withey House, Withey Close West, Bristol 9.

MCGREGOR, R.A., The Railway Arms, Station Road, Theale, Berks.  
MANKTELOW, Mr. & Mrs. J.T., 14 Lakefield Ave., Toddington, Beds.  
MARKHAM, R.H.C., "Wetherby", Locking, Nr. Weston-Super-Mare, Som.  
MASKING, R.C., 3 Kingston Avenue, Chelmsford, Essex.  
MAXWELL, W.G.R., 12 Heybridge Drive, Barkingside, Ilford, Essex.  
MCDONALD, P.V., 34 Canford Road, Poole, Dorset.  
MCMILLAN, A.J.S., 5 Oakfield Road, Bristol 8.  
MERRY, A.L., 19 Long Handstones, Cadbury Heath, Nr. Warmley, Bristol.  
MOODY, I., 70 Grange Road, Newark, Notts.  
MOORE, B.H., 1 Brendon View, Queens College, Taunton.  
MOORE, G., 4 Hazelwood Road, Sneyd Park, Bristol.  
MORLAND, F., 4 Church Street, Westbury, Wilts.  
MORLAND, M.D., 4 Church Street, Westbury, Wilts.  
MORRIS, A.E., 6 Aubrey Road, Chessels, Bristol 3.  
MORRIS, A.J., R.M. 21314(D), M.T. Troop, 40 Commando, BFPO 628, Sarawak.  
MORRIS, Mr. & Mrs. W.A., 4 Maple Court, Drayton Rd., Borehamwood, Herts.  
MULVEY, C.J., 6 Cedar Park, Stoke Bishop, Bristol 9.  
MURRELL, Mr. & Mrs. H., Gelli Ber, Castleton, Cardiff.  
MURRELL, Miss J.J., Gelli Ber, Castleton, Cardiff.

OLDHAM, Mr. & Mrs. A.D., 17 Freemantle Road, Eastville, Bristol 5.  
O'MAHONEY, Mr. & Mrs. K.J., 34 Monks Close, Farnborough, Hants.

PADFIELD, M., 4 Ryde Road, Knowle, Bristol 4.  
PARKES, J.G., Woodcote, Wood Lane, Parkgate, Wirral, Cheshire.  
PEARCE, Dr. R.A.J., No.3 Rodwell Hall, St. Thomas Rd., Trowbridge, Wilts.  
PEARSON, Mr. & Mrs. H.A., 111 Hampton Road, Redland, Bristol.  
PEASE, R.F.W., 1 High Street, Girton, Cambs.  
PECKHAM, G.E., 7 Marlborough Avenue, Reading, Berks.  
PECKHAM, P.H., 40 Hazelbury Road, Knowle, Bristol 4.  
PERRY, G.J.S., 16 Pinewood Close, Westbury, Bristol.

PERRY, J.D., 16 Pinewood Close, Westbury, Bristol.  
PHILLIPS, J., Battery Cottage, Upton Fort, Osmington, Weymouth, Dorset.  
PHILLIPS, J., 142 British Road, Bedminster, Bristol 3.  
PHILLIPS, T., High Point, Stowe Rise, Buckingham.  
PHILLPOTT, J., Rush Common House, Abingdon, Berks.  
PHILLPOTT, R.A., 3 Kings Drive, Bishopston, Bristol 7.  
PICK, S.J. 80 Letchworth Road, Leicester.  
PICKNETT, Dr. R.G., "Suilven", Potters Way, Laverstock, Salisbury, Wilts.  
PICKSTONE, C., 126 Knowles St., Radcliffe, Nr. Manchester.  
PILKINGTON, G., 45 Hargreaves St., Nelson, Lancs.  
POINTING, G.H., 10 Green Lane, Avonmouth, Bristol.  
PREWER, Mr. & Mrs. B.E., East View, West Horrington, Wells, Som.  
PYKE, Dr. & Mrs. R., 88 Redland Road, Bristol 6.  
REYNOLDS, G.F., 16 Sheep St., Wellingborough, Northants.  
REYNOLDS, P.M., Riverside, High Street, Kinver, Stourbridge, Worcs.  
REYNOLDS, T.E., Yew Court, Pangbourne, Berks.  
RIGG, Mr. & Mrs. A.J., 26 Wynford Road, Frome, Som.  
ROACH, Mr. & Mrs. B.S., 21 Yew Tree Close, Yeovil, Som.  
ROBERTS, G.A., Mechanisation Dept., S.W.Gas Board, Sydney Wharf, Bathwick Hill, Bath.  
ROBERTS, P.R., 34 Thornhill Road, Sparkhill, Birmingham 11.  
ROGERS, Dr. A., Dept. of Physiology, The University, Bristol.  
ROGERS, D.S., 20 Brunei Road, Bedminster Down, Bristol 3.  
ROSSER, A.J., 133 St. Peter's Rise, Headley Park, Bristol 3.  
ROYFFE, R.V.W., 21 Ledmore Road, Charlton Kings, Cheltenham, Glos.

SAVAGE, D., 17 Bellevue Crescent, Clifton, Bristol 8.  
SEALY, Mr. & Mrs. A.E., Hillgrove Farm, Hillgrove, Wells, Som.  
SEER, A.R., 18 Ilchester Crescent, Bedminster Down, Bristol 3.  
SHARPE, E.W., Tralee, Orchard Road, Arnside, Westmorland.  
SHARPE, T.J., 52 St. Matthews Road, Cotham, Bristol 6.  
SHAW, Com. T.R., The Retreat, Brentor, Tavistock, Devon.  
SIMMONS, Flt. Lt. M.G., 10A Berwick Road, Shrewsbury, Shropshire.  
SKINNER, Mr. & Mrs. J., 24 Harrowdene Road, Bristol 4.  
SMART, J.A., 10 Olmerod Road, Stoke Bishop, Bristol 9.  
SMITH, P. Howitt, 127 Sommerville Road, Bristol 6.  
STANBURY, T.H., 31 Belvoir Rd, St. Andrews, Bristol 6.  
STANTON, Dr. & Mrs. W.I., Iona, High Green, Easton, Wells, Som.  
STAYNINGS, Mr. & Mrs. R.J., 8 Fanshawe Road, Hengrove, Bristol 4.  
STEVENS, G., 36a St. Matthews Road, Cotham, Bristol 6.  
SURRELL, Mr. & Mrs. A., 216 Evesham Road, Headless Cross, Redditch, Worcs.  
SUTCLIFFE, D.M., 73 Watford Road, Kings Langley, Herts.

TAMER, D.B., 2174 Bartlett Ave., Victoria, B.C. Canada.  
TEASDALE, Mr. & Mrs. L.M., 47 Camborne Rd., Morden, Surrey.  
THOMAS, J.A., 13 Hale Reeds, Heath End, Farnham, Surrey.  
THOMPSON, A.L., 21 Shaftesbury Road, Oldfield Park, Bath.  
THOMPSON, M. 7 New St., Wells, Som.  
THOMSON, Dr. & Mrs. D.M.M., "Pinkacre", Leigh-on-Mendip, Bath, Som.  
TOMKINSON, G., 19 Beech Road, Birmingham 30.  
TOVEY, S.N., 54 Cowling Drive, Stockwood, Bristol 4.

TRATMAN, Dr. E.K., Penrose Cottage, Burrington, Bristol.  
TREBESS, P.R., 44 Rockliffe Rd., Bathwick, Bath, Som.  
TRICKEY, A.J., "Stanleaze", Brockley Way, Brockley, Backwell, Bristol.  
TRINGHAM, D.A., Northlongwood, Beggarbush Lane, Fairland, Som.  
TUCK, Mr. & Mrs. N.W., 48 Wiston Path, Fairwater, Cwmbran, Mon.  
TUDGAY, Mr. & Mrs. G., Top Flat, 1 St. Edward's Rd, Clifton Wood, Bristol 8.

URWIN, Miss K.M., 32 Tunbridge Close, Chew Magna, Nr. Bristol.

WAINWRIGHT, M., c/o Bureau of Mineral Resources, Box 378, Canberra City, ACT, Australia.

WALKER, R.I. 203 Redland Road, Redland, Bristol 6.

WALKINSHAW, D., 123 Stanley Road, Teddington, Middx.

WALL, Mr. & Mrs. M., Mount Pleasant, 10 The Dell, Kingsclere, Newbury, Berks.

WALLIS, Dr. F.S., The Museum, Wells, Som.

WARBURTON, D., 20 Beverley Court Road, Quinton, Birmingham 32.

WARWICK, Dr. G.T., 47 Weoley Park Road, Selly Oak, Birmingham 29.

WATTS, M.L., Berrymead, Winscombe, Som.

WEATHERLEY, I., 48 Weysprings, Haslemere, Surrey.

WEDGWOOD, Sir John, Barlaston, Stoke-on-Trent, Staffs.

WELLARD, C.R., 1 Elm Close, Yatton, Bristol.

WELLS, Dr. & Mrs. O.C., RFD 3 Leland Drive, Yorktown Heights, N.Y. 10598, U.S.A.

WEST, R.M., Elm Tree Cottage, Hallatrow, Nr. Bristol.

WESTLAKE, D.S.H., 41 Tristan Drive, Creech St. Michael, Taunton.

WESTON, P.L., 79 Oaklands, Chippenham, Wilts.

WHITE, R., 375 Fishponds Road, Eastville, Bristol 5.

WHITTLE, R.A., 8 Cote House Lane, Westbury-on-Trym, Bristol 9.

WICKHAM, H.T., Top o' the Hill, Church Rd., Hartley, Nr. Dartford, Kent.

WICKS, A.L., 193 Redland Road, Bristol 6.

WILLIS, Mrs. B.M. 3 Derwent Lodge, St. Philip's Ave. Worcester Park, Surrey.

WILLIS, D.A., 3 Derwent Lodge, St. Philip's Ave., Worcester Park, Surrey.

WITCOMBE, R.G., LHA Hostel, 18 Highbury Terrace, Highbury, London N.5.

WITHEY, Mr. & Mrs. M., The School House, West Horrington, Nr. Wells, Som.

WOODCROFT M.K., 86 Park Hill, Moseley, Birmingham 13.

WOODING, M.J., 25 Cromwell Road, Bristol 6.

WOODS, Mr. & Mrs. M., "Litton Cheney", Sedgeberrow, Evesham, Worcs.

WOOLLEY, R., 64 Devonshire Road, Bristol 6.

WOOLMER, A.N., 33 Merlin Crescent, Newport, Mon.

WYNNE ROBERTS, S.G., "Edenhurst", Lawn Road, Fishponds, Bristol.

YEO, Mr. & Mrs. I.N., 5 Broadway Road, Bishopsworth, Bristol 3.

YOUNG, D., 2 Conbar Avenue, Rustington, Sussex.

#### Affiliated Clubs

7th Battersea Senior Scouts Adventure Section.

Bristol Cathedral School Caving Club, Cathedral School, Bristol.

Bristol Grammar School Caving Club, Grammar School, Bristol.

Kings School Speleological Society, Kings School, Gloucester.

Sidcot School Speleological Society, Winscombe, Som.

South Town Caving Club, Clifton College, Bristol 8.