



FOREWORD

We have received a very kind letter from our President, Mr. H. E. Balch. He congratulates the Club on the report published in the last issue, and sends his best wishes for the future. Unfortunately Mr. Balch, who is 87, does not go out very often, as he is rather crippled by falls, and we know all Members will join with us in extending our sympathy and good wishes to him.

The Committee has elected Robert Woolley as Hut Warden and Richard Kenney as Librarian. The Library, such as it is, will be kept at Hill Grove Hut and Cdr. Lawder is fitting doors to the bookcase. This will be locked but the key will be available on request. Members borrowing the key will be responsible for any books removed during their actual stay at the hut. We will try to give an up-to-date list of the books, etc. in the next issue of the Journal, and the librarian will send Members books on payment of postage both ways. We are not particularly proud of our Library and Members can help to improve it by sending us any copies of books on caving and allied subjects. We hope all will co-operate by returning books promptly, and the scheme will be reviewed by the Committee in about six months time.

Denis Warburton has reduced the size of his two Eastwater Surveys, and is willing to provide copies at the cost price per set of 3s 6d plus postage. Richard Kenney has also kindly offered to supply members with plans of Sutherland caves at cost price, 2s 9d per set.

We notice a couple of cases of Members paying Hill Grove hut fees at the old rate. The present

fees are 2s first night and 1s for each subsequent night for Members, and 2s 6d per night for visitors.

Members will be very pleased to hear that Jim Swithenbank is making a satisfactory recovery from his motor-cycle accident. We hope it will not be long now before he is back in circulation. Since he has been away from the West Country several ladders have been taken out of use, and we will soon have to make special efforts to replace them.

Hon. Sec., Frank Frost, 22 Wolseley Rd., Bristol, 7
Phone, Bristol 44221

Hon. Treas., G. Williams, 1 Redhill Drive, Fishponds, Bristol.

We welcome the following new members:

M.R. BYWATER, 10 Cleeve Road, Bristol, 4.

J. CARPENTER, 106 Hillside Rd., Bristol 5.

M.A. CARTER, Cathedral School, Wells, Somerset.

J.E. LORD, 88 Newlands Park, London, S.E.26.

R. PALIN, 45 Queenshill Rd., Bristol 4.

D.A. SCAMMELL, Ivey House, Bristol Rd., Lanhill, Chippenham,
Wilts.

D.M. SUTCLIFFE, 62 Clarence Rd., St. Albans, Herts.

D. TITLEY, Whitley Cottages, Upton, Nr. Wiveliscombe, Taunton,
Somerset.

M. WAINWRIGHT, 5 Ashley Park, Bristol 7.

D. WALKINSHAW, c/o Harvey, 4 Schubert Rd., Elstree, Herts.

M.R. WALL, 7 Nassau Rd., Barnes, London, S.W.13.

SUBSCRIPTIONS POR 1956 - 57 WERE DUE ON OCTOBER 1st.
THESE SHOULD BE SENT TO THE TREASURER. 1.0s. for single,
12s 6d for family membership.

IT WILL BE APPRECIATED IF ANY ONE NOT WISHING TO
CONTINUE HIS MEMBERSHIP WOULD INFORM THE
SECRETARY.

Result of Ballot for Committee

Eighty-six papers were received.

Oliver Wells found that he would be unable to attend meetings and therefore resigned from the Committee. He received 78 votes.

Those elected received the following votes:

Devenish 77, Davies 76, Warburton 75, Ford 65, Lawder 61,
Kenney 59, Willis 55, Mrs. Willis 50, Woolley 50.

Votes received by those not elected were:

Hooper 22, Barrington 22, Brooks 11.

The "Wessex Cave Survey Group" is anxious to obtain one or more "Watkin" Hand Clinometers. Will any Member who has one he would be prepared to sell or loan please contact D.C. Ford, 4 Kensington View, Bath.

Future Events.

U.B.S.S. Lectures. These will be held on Mondays at 8.15 p.m. in the Geography Lecture Theatre of the University, entrance University Road.

Jan. 21st, 1957, Dr. R.J.G. Savage, Ph.D.

"Adam's African Ancestors."

Feb. 4th, 1957, Mr. J. C. Coleman,

"Irish Cave Exploration: A Review."

Feb. 18th, 1957, Mr. Nicholas Thomas, M.A.

"Excavations at Snail Down."

March 4th, 1957, Annual General Meeting.

Presidential Address. "Wookey Hole Cave."

Anyone interested is welcome to attend. All the lectures will be illustrated by lantern slides.

G.B. Guest Days (for Wessex C. C.): 1957. Jan 19/20th, Mar. 9/10th, April 20/22nd (Easter), June 1/2nd, July 13/14th, Aug. 17/18th.

The attention of Members is particularly called to the letter from the Hon. Secretary of the U.B.S.S., which is printed on page 170 of this Journal.

Sat. Jan. 19th, Club Supper, White Hart, Wells,
6.45 for 7 p.m.; 5s. to 6s. Due to catering difficulties the size of the party is limited to 25. Names to the Secretary.

Sun. Jan. 20th, Swildon's to Sump I, max. no. 10.
Meet at Hill Grove 10 a.m. Names to E. R. Kenney, 20 Mary Rd. , Wells.

Sat. Feb. 2nd, Swildon's Scavenging Parties. No limit. Meet Maine's Barn between 2.30 and 4 p.m. If possible bring scrubbing brush and canvas bucket. Names to Dr. O.C. Lloyd, Withey House, Withey Close West, Bristol, 9.

Easter. If it is found possible, we hope to arrange the usual Club trip to Yorkshire.

M.R.O. The Wells Police have changed their telephone number. In the event of a cave accident ring Wells 3481.

WESSEX CAVE CLUB RULES.

1. That the Club shall be called the Wessex Cave Club.
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.
3. That the Club shall consist of Honorary Members and Ordinary Members who may be of either sex.
4. That the President, Vice Presidents and Honorary Members shall be entitled to exercise all the privileges of ordinary members, including the rights to stand for office and for the committee, and all voting rights. The President and Vice President shall retire annually and be eligible for re-election.
5. That the affairs of the Club shall be conducted by a Committee which shall consist of a Chairman, Honorary Treasurer, Honorary Secretary, Honorary Assistant Secretary, Gear Curator and nine other members who shall retire annually and be eligible for re-election, and that the Honorary Secretary of any group within the Club be eligible to attend a committee meeting in an ex officio capacity, and may nominate a substitute to attend any meeting which he cannot attend personally.

All members standing for office or for membership of the Committee must be nominated by two members of the Club. The Committee shall fill any casual vacancies. An Honorary Auditor shall be appointed each year at the A.G.M.

6. That the election of the Committee shall be by postal ballot, and that the Club year shall end on Sept. 30th and the A.G.M. and Club Dinner shall be held during October.

7. That any person desiring to join the Club must be nominated by two members and elected by the Committee. A minor must obtain the written consent, of his parent or guardian.

8. That the subscription for Ordinary Members shall be 10s. per annum due on Oct. 1st each year, and every new ordinary member shall be required to pay an entrance fee of 5s. Any Member whose subscription has become more than three months overdue shall be named in the next Journal, and if within one month the subscription has not been paid, the Member's name shall be removed from the list of Members and notice to this effect shall be sent to the Member. The subscription of a Member joining near the end of the financial year may be deemed, at the discretion of the Committee, to cover the subscription for the following year. Married couples may become joint members paying an annual subscription of 12s 6d. They shall enjoy all the amenities of the Club, except that they shall receive one copy of each journal issued and one vote only.

9. That a charge of 1s 6d (exclusive of any gate fee) shall be payable by any non-member who takes part in any trip on which Club gear is used. The size of the party shall be at the discretion of the leader.

10. That every person whether a Member or not,

making use of the services of a guide or guides, or taking part in any activity or expedition organized by the Club, or in which any Member of the Club shall take part, shall do so at his or her own risk, and that he or she or his or her legal personal representative or assigns or dependents shall have no claim or right of action against the Club, or any Member thereof in respect of any damage loss or injury sustained notwithstanding any negligence of the guide or any Members, or the body of Members of the Club.

11. That an extraordinary general meeting may be called at anytime by the Honorary Secretary when required to do so by the Committee, or in writing by ten members of the Club. Two weeks notice must in all cases be given. Such a meeting may not pass a resolution, but by a simple majority of those present may draw up a resolution to be voted on by postal ballot within one month by the members of the Club.

12. That Members using the Club's Headquarters shall leave it in a tidy and clean condition.

13. That no alteration shall be made to these rules except at the A.G.M. or by special resolution passed at an E.G.M. called at the request of the Committee.

14. Any person whose membership is deemed to be undesirable by a three-quarters majority of the Members present at a general meeting, at which the Member concerned shall have an opportunity of being heard, shall be expelled from the Club.

15. That the Committee shall have the right to refuse the use of Club possessions to Members

when they consider it desirable in the interest either of the Club or the Member concerned but the Member concerned shall have the right of appeal to the Committee against this decision.

16. That caving clubs or societies attached to schools, youth or scout organizations etc., may become affiliated to the Club on the approval of the Committee. The subscription shall be 1s 6d per member per annum. Only one copy of each journal shall be sent to each affiliated body. Note. "The concession given by this rule is normally intended for minors who are not wage earners. Wage earners and adults should only be admitted under the rule in the proportion of one to ten minors".

17. That members of affiliated bodies may become Ordinary Members of the Club when their application has been approved by the Committee and the annual subscription has been paid. The entrance fee shall be waived for Members joining the Club in accordance with this rule.

18. That notices of motions for discussion at the Annual General Meeting shall be received by the Hon. Secretary not less than three weeks before the date of the meeting. Such notices of motions must have the names of the proposers, and be circulated to the Members at least seven days prior to the meeting.

19. That at each A.G.M. the Club shall decide on the sum of money that is to be placed for that year in the Hut Sinking Fund. This Fund is to be used only for major repairs or replacement of the main hut at the Club's Headquarters. The administration of the fund is in the hands of the Committee.

THE NORWAY EXPEDITION

Last summer the Cambridge University Caving Club sent an expedition to North Norway. Those taking part were Mike Duerden (Caius), David Morris and Oliver Wells (both of Trinity), all of whom read Engineering. Dick Kirkland (Trinity) and Wilf Theakstone (Jesus) are geographers, Paul Dyson (Trinity) reads Geology, whilst Bill Spowage (Pembroke) reads English. Our specialists were Oliver who is a cave diver, versed in the mystic lore of the breathing apparatus, Dick rapidly becoming expert in the techniques of underground photography, and Paul who as the only geologist in the party was able to make weighty pronouncements without fear of contradiction.

Before leaving England we received an S.O.S. from the Nottingham University Expedition, a section of which had been echo-sounding in Lake Viedestronde. They had dropped an outboard motor in 60 ft. of water, and wanted Oliver to try and retrieve it for them. Thus it was that the car-borne members of our expedition, Paul, Bill and Oliver, made a short detour on the second day of the trip north. They found that two boats had been laid on for the dive. One was the local ferry, a stout vessel about 40 ft. long, smelling of diesel fuel, the other a 15 ft. rowing boat to which had been added two cabin-like structures and a massive diesel engine. This one smelt of fish. Unfortunately the afternoon's diving was unsuccessful, as Oliver's suit developed a leak, and because the visibility down below was practically zero.

This was due to the fact that the lake is composed of glacier water, and glacier water is like blue milk. We therefore accepted the invitation of our hosts to spend the night at Viedestronde Villa with them, as we intended to dive again the next day.

Accordingly we piled into the smaller boat and chugged off up the lake for about thirteen miles. The Villa proved to be a wooden hut, in an advanced state of decay, built on piles over the edge of the lake. We fed and slept well.

The next day we cruised precariously down the lake again for another dive. Again Oliver was defeated by the severe cold and the lack of underwater visibility. Time was pressing too, and midway through the afternoon we left the lake and rejoined the road north. Thus it was not until the evening of Monday, the 20th August, that our heavily laden and dusty Ford Popular drew up outside the youth hostel at Mo-i-Rana, 700 miles from Bergen, where its three occupants were greeted by the four members of the Club who had come north by rail. They had already carried out a reconnaissance of the area, and had discovered that the best available camp site certainly could not be reached by car.

The next day we moved on as far as we could by road and then carried our kit up the trail to Lake Reingardslivatnet, a thousand feet up among the hills below the Svartisen Ice-cap.

The aims of the expedition were to explore, survey and photograph the caves in that area, notably Larshullet, which is, at nearly 1100ft., the deepest pot hole in Northern Europe. Any exploration in what is not completely virgin territory must inevitably avail itself of data gathered by previous explorers. In this respect we were particularly Indebted to the writings of Gunnar Horn, a Norwegian Geologist, and to those of C. L. Railton of the C.R.G.

After we had settled in, our first task was to locate and identify the caves in the vicinity.

This was made doubly difficult by the broken nature of the ground and by the dense birch scrub which covered it. At the end of our first search two likely looking cave entrances had been found, but before they could be positively identified, preliminary reconnaissance would have to be made underground.

We therefore split into two parties, the first consisting of Paul Dyson, Dave Morris and Bill Spowage. The cave chosen by this party was not a roomy one, and showed extensive development along steep and narrow bedding planes. In non-technical language it turned out to be a species of glorified storm drain. Over-four hours were spent underground on this trip, hours spent mostly in wriggling and crawling along steep and narrow passages which had muddy floors and abrasive roofs. As a result of this thorough exploration we were later able to identify this cave as Olavsgrotten.

The second party was composed of Oliver Wells, Mike Duerden, Wilf Theakstone and Dick Kirkland. This group found themselves in a far roomier and more extensive cave system, which in many respects resembled Larshullet. But again, as we later discovered, it was not Lanshullet but the less important Laphullet. This, however, was not known at that time, and round the camp fire that night we decided to mount a full scale expedition on the morrow.

Accordingly, the next morning saw the whole expedition underground in one cave, where literally no stone was left unturned in our search for the junction of three large passages, which would positively identify Larshullet. In this we were unsuccessful and we returned, somewhat disappointed, to the surface, which we reached in the early afternoon. Almost immediately Wilf, Dick and Dave

set out into the scrub in another effort to find the entrance to Larshullet. After about an hour Will's efforts were rewarded by the discovery of a likely looking cave entrance, and he and Dave, though not equipped for-caving, and having, but a hand torch between them, crawled in to the cave and penetrated nearly 150 yds. before returning to inform the others of their discovery. By that time it was growing late, so back at the camp we had a hasty supper, consumed amid much speculation as to the identity of this new discovery. After the meal Wilf, Mike, Paul and Dave donned boiler suits, helmets and boots, recharged their carbide lamps and set off up the hillside through the evening sunlight.

The three of us who were left behind tidied up the remains of the meal, built up the fire and settled down to wait for the return of our companions. It was three hours later that we heard them, crashing down the hill side through the undergrowth, singing and shouting that the cave was indeed Larshullet. As we prepared for sleep the story was passed from tent to tent, and we heard how the four had covered 300 yds. of constricted passage before entering a large chamber, had continued thence along 800 yds. of vast and tunnel-like passage and had finally arrived, at the top of a 100 ft. vertical pitch. This proved beyond doubt that we had at last found Larshullet.

Bill Spowage & Dave Morris.

To be concluded.

THE ANNUAL DINNER

The Club's Annual Dinner was held at the Cave Man Restaurant, Cheddar after the Annual General Meeting. It was a little late in starting, as the Chairman had to go to Bristol to fetch our principal guest. Possibly as a result of this, the 102 diners were a little noisier than usual and gave the speakers rather a rough passage. However, they managed to ride the storm, not least because an atmosphere of good humour prevailed.

The toast of "The Queen" was honoured in silence, after which smoking was permitted. After coffee had been served Dr. Lloyd rose to propose the health of the guests. We had with us representatives of the other four-principal Mendip Clubs: the M.N.R.C., the U.B.S.S., the B.E.C. and the Axbridge. Of these the former was the oldest, having recently celebrated its Jubilee, while the youngest, the Axbridge, could in no way be said to be juvenile. Mr. Sealey of Hill Grove was with us again. The guest of the evening was Dr. F.S. Wallis, Director of the Bristol City Museum. Dr. Lloyd outlined his distinguished career and mentioned his principal activities and interests. The latest of these was a study of polished stone axes made from igneous rocks. From these he would cut a thin section and by examining it under the microscope could be reasonably certain of its structure and composition. By means of this he was often able to identify the quarried source or factory for these axe heads; some came from Cornwall, others from Wales or the Lake District, others were-foreign. It was also possible to map out the trade routes followed by the late Neolithic and early Bronze Age men who used these axes. At Avebury axes from nearly every source were found, which suggested that it was one of the great emporiums of the South West. This investigation had yet to be extended to other parts of the country.

In his reply Dr. Wallis said that Geology and Spelaeology were so closely linked that geologists could never feel they were outsiders in caving circles. They were sister sciences, and the protagonists of both were thrilled by the hills of Mendip. He referred to Kipling's verse;

God gave all men all earth to love,
But since our hearts are snail,
Ordained for each one spot should prove
Beloved over all.

For us that spot was Mendip. Caving was more than a sport for the enthusiast, for he was attracted both to Geology and Archaeology. He stressed the importance of a knowledge of modern technique in the latter field, and said that co-operation between the three sciences was all the easier because of the prevailing spirit of comradeship, in which experiences were freely exchanged and knowledge freely discussed. Such a relationship ruled out the possibility of bogus cave paintings in this country; we lose the publicity but we retain our integrity. He wished us good luck with our excavation of Pen Park Hole. The Bristol Evening Post was watching us closely and we would get all the publicity we wanted, if Professor Palmer's figures were correct!

The health of the Club was proposed by Alfie Collins of the B.E.C. and replied to by Howard Kenney. "Who is the Club?" asked Kenney, and proceeded to outline the Seven Ages of Man, as he saw it in the lives of Club Members. First the young men with unbounded energy and limitless free week-ends, equally interested in the pots to be found in Eastwater and those at the Hunters' Lodge. Then the pretty young Misses, of whom it might be doubted whether they were more keen to find a cave

or a cave-man. Those with pretty new wives who paid half a crown extra to go with their husbands and find out what went on. Others who joined just to get another badge. Older men who still went caving, as they had not yet got rheumatically joints or pot-bellies. Finally those who worked with pen and tongue, the armchair cavers, whose memory for the caves they knew grew ever dimmer with the passing of time, yet dearer. We must tolerate and respect all these types, which go to make a Club, remembering that we too must pass through these stages ourselves.

After we had drunk the health of Absent Friends the proceedings became informal. At a fairly late stage the Squeeze Machine was brought from Hill Grove by Christopher Hawkes. It was a pleasure to have been able to renew acquaintance with so many of one's friends, particularly those who live at a distance and so are rarely able to visit Mendip.

STOKE LANE DIVING.

The exploration of the second sump in Stoke Lane by the Cave Diving Group was a failure, but it aroused the enthusiastic support of so many members of the Club that the events are worth recording. It was at a meeting of the C.D.G. in December 1955 that I was asked to make the necessary arrangements, and the date was fixed for the 1st September, 1956. There were to have been two divers, John Buxton and Oliver Wells, but in June 1956 the latter had to withdraw, as he could not get back from Norway in time. Though we did not know it, this withdrawal probably had more effect on the success of our enterprise than anything else, because when there are two divers the chances of a

technical fault putting a stop to the diving are reduced by much more than a half.

After careful discussion with Derek Ford and the two divers it was decided that an arrangement such as we used in Swildon's in June 1954 would be best. This meant getting the divers' equipment beforehand; having an "in" trip a week before the diving, in order to get all equipment, dry clothes for the sherpas and food to the base; limiting the supporting party on the actual dive to the smallest number compatible with efficiency; and having an "out" party the day after the dive, to get everything out of the cave again. Once again this scheme worked admirably, because of the keenness shown by so many members of the Club.

For the "in" party on the 25th August there were 16 cavers. This includes Luke Devenish, who, fired by the high spirits of the rest of the company, came with us as far as the Nutmeg Grater. Richard Kenney came with us as far as Sump I and then kept Luke company. The latter wrote in the visitors' book, "This cave is getting tighter." The rest of the party took 12 packages, including the aflo, to the base by Sump II and began to emerge from the cave no more than two hours and ten minutes after the last man had entered. This speed was indeed astonishing and took place in spite of many people losing their way.

On the 1st September was the dive itself; the first serious attempt on Sump II. John Buxton the diver was accompanied by three sherpas, Tony Morrison (photographer), Struan Robertson and myself. Derek Ford was unable to come, as he had been detained in the extreme North, while Phil Davies, who hoped to come, had an accident the previous week. As it turned out the number of sherpas was just right; nobody had too much to do,

nobody was idle. Besides, there is scarcely room at the base for any more people.

We entered the cave at 4.5 pm. and made a quick trip through to the base, the diver wearing his Seafus suit with a boiler suit over the top. The Nutmeg Grater he described as "a bit snug", but he got through without tearing anything. At base we changed into dry clothes, assembled kit, prepared food and soup, and it was 6 pm. before Struan began to keep the log. I acted as dresser and arranged the life line, while Tony took a number of photographs which have turned out very well. Struan managed to set fire to himself as well as to the Tommy cooker, but succeeded in putting out the accidental conflagration more thoroughly than on a previous occasion.

At 6.45 pm. John got into the sump without his apparatus to see what it was like. He then found a leak in his right cuff, so he put his gauntlet over it and bound it with a rubber band. It still leaked a bit after that, but gave no serious trouble. We then fixed the aflo line to a belay and the breathing apparatus was tested for leaks. At 7.5 pm. John said that the soda-line container was slightly damp. This proved an under- estimate. At 7.20 pm. he had got everything on and began his breathing drill. He found it difficult to draw air in through the cannister, sucked hard and found his mouth and throat filled with caustic soda. He turned to air, coughed, took his mask off and rinsed the affected parts in water for about 5 minutes. Burns by caustic alkalis of this kind can be very troublesome or even serious. John was lucky not to have got any of it further down than his throat. It was evident that the soda-line cannister had been flooded, probably before the "in" trip, he thought. That put an end

to the use of breathing apparatus for diving, so he took it off.

At 7.32 pm. he returned to the sump and explored it on the end of a line by diving with his breath held. In this way he found that nearly all the water from the streamway, which enters the pool from the E., is deflected northwards by a large submerged boulder, after a distance of about 8 ft. It then travels through an opening to the N. The floor of this stream-washed part is rock, while that of the rest of the pool is mud. The passage is about 2 ft. deep by 3 ft. wide and its upper lip is about 4 ft. below surface. After about 5 ft. it appears to go upwards again. It is quite big enough for a diver with breathing apparatus. There are no other openings of significance in the pool.

We had supper after this, began to pack up at 8 pm. and were out of the cave by 10 pm. * Mr. and Mrs. Stock were very kind to us and gave us some tea when we had changed. We are grateful to them not only for this, but for having allowed us all their facilities for all three trips free of charge. After drinking tea in that spotlessly clean kitchen I began to become reconciled to the thought of having to go through that sump again.

The next day a party of 13 led by Trevor Shaw removed our 10 packages from base. They took between $2\frac{3}{4}$ and $3\frac{1}{4}$ hours. Howard Kenney brought with him five members of the Bedford School Affiliated Club. He hoped to be able to show them some of the beauty of the cave, but this did not prove possible. However, as he said afterwards, it was nice and wet and the company was good. This and many other expressions on the part of other helpers makes me feel that we can confidently promise our support once more to John Buxton and other members of the C.D.G., if they wish to try

again. The sherpas for the "in" and "out" parties were: Talbot Austin, Tony Burleton, Luke Devenish, Tony Dunn, Alan Fincham, Christopher Hawkes, Chris Ineson, Howard and Richard Kenney, Oliver Lloyd, Alan Merry, Rosemary Mines, Tony Morrison, Struan Robertson, Spud Murphy, Robert Pyke, Trevor Shaw, Derek Thorpe, Malcolm and Vincent Watts, Brenda Willis, Robert Woolley and the five Bedford School boys. To then and to John and Audrey Buxton we owe the smooth running of the expeditions.

Oliver C. Lloyd.

MENDIP NOTES,

Longwood Water

The survey of the Longwood and August Hole systems is crying out for revision. It is some time since it was proved by colour tests that, contrary to the Strides' opinion, the water from the twin pots below Longwood main chamber enters the August Hole master cave. But an experiment carried out on the 7th October, 1956 by Tony Morrison and Oliver Lloyd makes yet another part of the survey hard to understand.

The experiment was a simple one: the water was diverted down the main entrance to the cave, and Morrison observed the changes that took place in water flow underground. The water entering the main shaft collects in a pool just by the "S" bend, where it sinks among small boulders. The "S" bend and tight rift which follow remain dry, and the water (apparently in full quantity) is seen emerging from a crack about two feet below the lip of the first 10 ft. drop. It sinks in boulders and re-emerges half way down the second 10 ft. drop. From

here it cascades down to the floor of the junction between the Longwood and August Hole systems, where most of it is lost. A small trickle follows the great rift of Longwood.

The two great overhead cascades are almost completely staunch: one normally entering the roof of the water chamber of August Hole, the other the roof of the south end of the great rift of Longwood. This confirms the opinion expressed in these columns in June 1955 (No. 51, pp. 10 & 11). There must be high level passages leading water to these two sites from the terminal sink in the valley. The descent of the 30 ft. pot in August Hole becomes comfortably dry and very little water flows through the tunnel. At the far end of this, however, an enormous mass of water is found to be pouring out of the "escape route" from the left here, side. Beyond this point the way is as wet as it would have been, if the stream had not been diverted.

If the "escape route" is followed to its source the water is seen to be entering an aven. This aven is shown on the Strides' survey to begin at a level higher than that of the lip of the first 10 ft. drop and about 40 ft. further up the valley than the main entrance shaft. How the water gets from one to the other is a mystery.

Paradise Regained

A few months ago Derek Ford visited the high-level series in Paradise Regained, which was the scene of Wells' maypole operation in October 1955 (Jour. No. 54, p. 22). The passage leading to Keith's Chamber has two openings on the left, and it was these that he examined. The first proved to be an ox-bow, connecting up with a cross-joint passage between the Mud Sump and the main rift. The second closed down after a short distance.

With regard to Dennis Kemp's notes about getting through the Mud Sump, Ford suggests that it is easier to take this obstacle lying on one's back with the right arm stretched out in front, rather than with both arms by the sides. The leading arm provides useful leverage when most needed and can carry a torch. He agrees with Kemp that a sand bar tends to form across the Mud Sump at its narrowest point. In December 1955, when leading a party, he struck a firm obstruction which he had not met before. The result was a brief but unpleasant period of total submergence before he could force his shoulders partly over and partly through the bar. A few kicks with a boot, when he was through, soon displaced it. On that occasion the air-space in the tunnel was about 4 ins. in height, and this he considers to be the safe minimum.

He adds that it is apparent that a "Mud Sump Users' Association" is indicated. A collecting box could be placed on the St. Pauls side and the broken and muddy fragments of glucose tablets which might accrue inside it, once its purpose was known, could be used to induce some famished caver to bail and dredge the place on occasions. I think that the suzerain of that particular canal is likely to remain indifferent.

"Divine" anger?

Richard Kenney is sure that Alan Fincham has aroused the wrath of some of the cave gods. He writes that Fincham's wide-gauge bore-hole at Cross Swallet has led to many complications; as befits the times, they have been chastized where it hurts most; in their transport. Bob Lawder's car had a broken big-end; George Weston had a broken half-shaft; Christopher Hawkes had a

puncture, and Richard's motorbike had a broken oil pipe. A trip to Swildons' Upper Levels only made things worse, for he got well and truly stuck in the roof pool above the Wet Way lavatory basin. This, he says, supports the theory that the cave gods work on a regional basis. Alan, it appears, has missed all these troubles. My own view is that the cave god only has power within his own cave. Richard was once a devotee of the Swildons' cave god, but having left him alone for some years, the god is clearly punishing him for-desertion.

King John's Hunting Lodge

One of our Club members, Philip Rahtz, is busy excavating the site of the Royal Hunting Lodge at Writtle in Essex. Timber-built in 1211 A.D. at a cost of £13.6s.8d, it was used by several kings until some time after 1305, when it appears to have been destroyed by fire. From 1360 to 1521 it was used by the Dukes of Buckingham, who built many buildings there. This complicates the work of the archaeologist unduly, because he has to uncover so many layers before reaching the earliest. However, they have pretty well identified the positions of the original buildings, and have recovered much of the king's pottery, which he was in the habit of throwing away, when it got broken, together with keys, horseshoes, nails and a dagger, with one coin of Henry III. There was also a royal cesspit.

The Buckingham levels have been even more productive, but above these the highest and most recent horizon contains old wheels, pistons, chains, back axles and tins laid down in the recent war. These will no doubt be of incalculable value to future archaeologists. I wonder what King John would say.

Cheramodytes.

GOUFFRE BERGER - THE DEEPEST CAVE IN THE WORLD.

(1122 metres — 3680 ft.)

In 1956 an international expedition organized by the French has penetrated even deeper in the Gouffre Berger near Grenoble. This cave was discovered in 1953 and was first famous in 1954 when it became known as the deepest known cave in the world. On September 11th of that year the explorers had reached 2425 ft. and so passed the 2389 ft. record, which the Gouffre de la Pierre St. Martin had enjoyed for over a year. Then on the 24th of the same month they continued downwards to 2959 ft., or well over half a mile.

The story up to then has been told in a book reviewed in this Journal (No. 57 p. 88), "Operation 1000" by J. Cadoux and three of his colleagues (1). Very little has yet been published on the 1955 and 1956 expeditions. Of the latter I have seen only two references in the British Press (2), both of which give the wrong depth. They confuse the subject still more by having a bogus translation of the name of the caves it was in fact called after its discoverer, M. Berger, and is not the "Shepherd Pit" at all. The principal French caving journals are always slow in publishing, but the Italians did have a short note (3) on the 1955 expedition. Last September an account in a Swiss journal (4) described both the 1955 and 1956 expeditions.

There was a preliminary expedition in July 1956, when two tons of equipment were taken down to form a depot at 2100 ft. The French Army were assisting with wireless communications and Electricité de France had lent a helicopter to Transport the five tons of food and equipment to

the cave mouth. Besides the French cavers who have been forcing the cave a little further every year since 1953, there were invited representatives of nine other countries including Great Britain.

The main descent began on August 2nd. The explorers were usually divided into two or more groups, so that tackle could be rigged by one while the next was still carrying equipment forward in relays. Five underground camps were set up altogether, the deepest at 3280 ft. The weather was bad, delaying progress, and all the gear, including sleeping bags and "dry" clothes, was drenched between Camps III and IV. After eight days the main party was at Camp V and from there the bottom of the cave was reached. There is a sump about 25 ft. in diameter at more or less the same level as the terminal sump in the resurgence cave (the Caves de Sassenage). The explorers were still below 3000 ft. on August 16th, when a very violent storm broke on the plateau above, and they were cut off for 70 hours. Those who were in camp at 3081 ft. found that the wind from the roaring waterfall 50 yards away was strong enough to blow out their acetylene lamps.

The Gouffre Berger is thus almost half as deep again as any other known cave in the world. The runner-up is probably still Pierre Saint Martin (2389 ft.) and third comes the Trou de Glaz and its associated systems at 1980 ft. (The depth of 2157 ft. given in Chevalier's book (5) was based in part on an old survey and Jean Noir's more accurate figure is 1980 ft.) I have heard a recent American figure of 3000 ft. for the depth of Ophir Cave in Montana, which would put this cave into second place; the figure is said to be based on altimeter readings, but nothing has yet been published, and I am not in a position

to confirm the result.

The 1956 Berger expedition has broken another record - that for the longest period spent underground at one time. The advance party descended on August 2nd and on August 16th they were still below 3000 ft.; altogether some of the party spent 17 days below ground. Until then the record was held by G. Worknan, who remained in Gaping Gill alone and self supporting for a fortnight. This was done, however, for purposes other than pure exploration. Casteret's stay in Pierre Saint Martin in 1953 amounted to over ten days (232 hours).

The whole question of records in caves has been examined in a recent article in *The Spelaeologist* (6). This is already out of date and a revision will be published this year.

Trevor R. Shaw
5th October, 1956.

References.

- 1) Cadoux, J. et al, 1955, "Operation 1000", Arthaud.
- 2) Anon, 1956 (13th Aug.), *Daily Express*: 1
Anon, 1956 (13th Aug.), *The Star*.
- 3) Noir, J., 1956 (March), *Rassegna Speleologica Italiana*, 8 (No. 1): 52.
- 4) Arnaud, C., 1956 (Sept.), "Gouffre Berger (Isere)",
Stalactite, 6 (No. 4): 83 — 88.
- 5) Chevalier, P., 1951, "Subterranean Climbers", Faber and Faber.
- 6) Shaw, T.R., 1956, "Recorditis", *The Spelaeologist* 4: 176 - 188.

LETTER TO THE SECRETARY.

Dear Frank, - G.B. Cave. The "In" and "Out" notices at the entrance to the cave have been altered, as the former arrangement was found to be unsatisfactory. It is now an indicator board with date, club, "In" and "Out" tabs, which should be used instead of writing on the board. Only the club down the cave will be indicated and not the names of individuals. Party leaders must arrange their own checks on individuals entering and leaving the cave.

The new arrangements have now been on trial for several months. On the whole they have proved satisfactory. This Society, acting as agents for the owners of the cave, wishes to remind clubs, and, through them, individual members, that it is still the policy of the owners to restrict entry to the cave, and that a "free for all" type of entry has never been envisaged or sanctioned. Nevertheless there is evidence from several sources that members of clubs are not observing the spirit of the rules, even if they manage to adhere to the letter. Especially there has been a serious abuse of the rules about guests. If this continues it will be necessary to rewrite the rules in much greater detail, and this will in turn entail much extra work for club secretaries and party organizers. For their sakes, if for no other reason, club members should abide by both the letter and the spirit of the rules. They have been granted considerable privileges by the owners, and these privileges should not be abused, for if they are, the owners are likely to withdraw them.

The guest rule was intended to cover only two groups of persons, and in future guests MUST fall into one or other group.

1. A Mendip club may have received hospitality

from a club in another area, and may wish to return that hospitality by arranging a trip down G.B. Cave, when that other club visits Mendip.

2. A distinguished visitor or an occasional friend of a member may be taken down as a guest. Guests of this latter group must never exceed three in number on any one trip.

G.B. Cave should not be used:-

1. As a training ground for cavers, who have had no experience elsewhere.
2. Nor for the type of man that is only likely to go caving once.

If a club party is large, there must be an adequate number of experienced cavers in it. The total number in the party must not exceed 20. In no circumstances is the device to be used, which was recently adopted by a club, of splitting a party into two, thereby introducing at least 40 people into a cave. Where more than one day at a week-end is allocated to a club, the club can use either day but not both.

Yours, Chris Ineson,
Hon. Secretary, U.B.S.S.

BOOK REVIEWS.

HOMES OF PRIMEVAL MAN: Wandering in the caves of Czechoslovakia, by Josef Kunsky. (Artia, Prague, 1954). 4to., 296p., illus., 21s.

A magnificent collection of photographs, on the lines of Bourgin's two studies of the Vercors. A representative number of the country's finest caves are illustrated, and there is not the restriction to prehistoric sites, that the main title

would lead one to expect. The standard of photography and reproduction are equally good, and of the 249 illustrations 182 occupy a whole page or more.

The book is divided into three sections, each dealing with a different part of the country, and each cave or group of caves is given a few pages of descriptive text. There is also a general introduction of eight pages, which would be more appropriate in a low quality guide-book. The translation is flowery but adequate.

As far as I can determine, this is not a simple English version of the Czech original, but it appears to be made up from parts of "Kras a jeskyně" (1950) and "Macocho a Moravsky Kras" (1953).

The price quoted is a reduced one at which the book seems to be generally available in England.

T.R.S., 28.12.55

THE CAVE DIVING GROUP, Letter to Members, No. 25, December, 1956. 4to., 6p. 1s. to members, 1s 6d to non-members, from Dr. T.D. Ford, 36 St. Denys Rd., Leicester.

Though this is the first News Letter to be published by the C.D.G. for 6 years, most of the news is recent. Items include the C.D.G. Constitution, list of members, future diving program, reports, notes on equipment and technique, a summary of the code of practice for the safety of divers and of the training schedule.

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