

FOREWORD

This year the Annual General Meeting was a relatively quiet affair, but we think most will agree that the Annual Dinner was a most enjoyable function. 108 members and friends were present, although we had in fact booked for 116, eight of whom failed to turn up. At the moment it looks as if the Club will have to meet the cost of their meals, as the Hon. Treasurer has received an account based on this figure.

The article "Swildon's IV" was rather longer than we had anticipated and, as we cannot increase the size of the Journal beyond 24 pages, it has been decided to print part of the second half in this issue, concluding it in the January edition.

May we again remind members that visitors cannot stay at the Club hut unless permission has been obtained from the Hon. Secretary or Hut Warden. Members who have booked have first claim on bunks etc. In every case the names of the proposed visitors must be given and permission will not be granted, if it will inconvenience members. It is obvious that members' interests must be our first consideration. Could we also bring to the notice of those members (and their friends), who still owe the Club hut fees, that we would like to receive the money due as soon as possible. This should be sent to the Hon. Secretary without delay.

Hon. Secretary, Frank Frost, 22 Wolseley Rd., Bristol, 7.
Tel Bristol 44221.

Hon. Treasurer, G. Williams, Cedarwood, Cadbury Camp Lane, Easton-in-Gordano, Somerset.

Subscriptions for 1957 - 58 were due on October 1st and should be sent to the Hon. Treasurer, G. Williams, Cedarwood, Cadbury Camp Lane, Easton-in-Gordano, Somerset. Full Members 10s., Joint 12s. 6d., Affiliated 1s. 6d.

We welcome the following new members:

Mrs. R.R. GLOVER, Joint membership.

J.T. MANKTELOW (full member), 17 Drayton Rd., Borehamwood, Herts.

Future events

G.B. Guest Day, December 21st/22nd.

U.B.S.S. Sessional Meetings for 1957 – 58

These will be held in the Geography Lecture Theatre of the University of Bristol at 8.0 pm. W.C.C. members are invited to attend.

- Nov. 4th Lady Aileen Fox, M.A., F.S.A.
"Early Settlement on Dartmoor."
Nov. 25th Mr. H.N. Savory, M.A., D. Phil., F.S.A.
"Recent work on Welsh Hill Forts."
Dec. 9th Mrs. E.M. Clifford, F.S.A.
"The Long Barrows of the Cotswolds"
Jan. 20th Mr. L. Railton
"Stereoscopic Photography of Caves."
Feb. 3rd B.R. Collingridge and G. Witts,
"Ireland, 1956 – 57."

March 3rd U.B.S.S. Annual General Meeting & Presidential Address,
 by Dr. E.K. Tratman, O.B.E., F.S.A.
 "The lost stone circles of North Somerset."

Details of tackle expenditure & income for 1956-57.

Expenditure

Tackle expenditure	£22 11 8	
Pen Park Hole ladder	<u>7 14 9</u>	
		£30 6 5

Income

Gear fees	£2 14 6	
U.B.S.S. and B.E.C. share of cost of Pen Park Hole ladder	3 18 6	
Gift towards cost of same	<u>2 0 0</u>	
		£8 12 0.

Omitted from Hon. Secretary's Report

The Club's very grateful thanks to A.J.S. McMillan (Mac) for his kindness in letting us have the use of his duplicator and providing the paper for the Journal at cost price.

Eastwater Cave. During a recent visit to this cave, O.C. Lloyd noticed a loose rock at the bottom of the "Ruckle of Boulders." He contacted C.H. Kenney and together they decided to blast it away. They tidied up the place, but it was not possible to finish the job then, so they planned to go back in a fortnight. They asked Mr. Weeks to keep the cave closed in the meantime.

Frank Frost.

ANNUAL GENERAL MEETING

The A.G.M. of the Wessex Cave Club was held at the Cliff Hotel, Cheddar, on Saturday the 26th October. George Williams took the Chair at 4.25 pm. About 45 members were present. After the usual preliminaries the Hon. Secretary read his report for the year, which is printed on page 278 of this Journal. In the discussion which followed only two matters of any importance arose. Frank Frost and Jim Swithenbank were congratulated on having rewired all the ladders. It was regretted that all the tethers had had to be replaced on account of loss. Swithenbank offered to describe the crimping method to any member who enquired. The other matter related to the door and window security of the hut at Hillgrove, which was too often deficient. Two hut keys had been lost during the year (one not so thoroughly as might have been safe), and so a new lock was now being fitted. Mr. Beauchamp of Battersea proposed a vote of thanks to the Hon. Secretary, pointing out how valuable to cavers living at a distance were the Journal and the willing help he had always received from members on the spot, particularly from the Hon. Secretary.

The Hon. Treasurer presented his Financial Statement, which is printed on pages 266 and 267 of this Journal. The Hon. Auditor (Howard Kenney) had sent some comments in writing from his sick bed. The hut fees, he said, were down despite increased membership and increased expenditure on heat and light. The theft incident should not be exaggerated. The previous record of honesty and dependability of members was good, and it was upon this that the collection of hut and gear fees depended. The account showed a flourishing position in a time of inflation, with increased surplus. This he attributed to an

increased membership and to efficient financial administration. The cost of the Third Party Insurance was up, as it was based on membership.

The Hon. Treasurer was asked to give details of the Tackle Expenditure (£30. 6s. 5d), whereupon it became apparent that the whole cost of materials for making the Pen Park Hole ladder had been included in this figure (some £7. 14s. 6d.). The Club had only undertaken to pay one third of the cost of this ladder; the other two shares (£1. 18s. 3d. each) had been received from the U.B.S.S. and B.E.C. and had been included in the accounts under the heading of "Gear Fees." As this didn't seem to add up and was in any case irregular, the Hon. Treasurer was asked to straighten out the matter and publish a short note in the next issue of the Journal. The Hon. Secretary pointed out that the stationery charge of £5. 4s. 9d. should properly have been attributed to the Journal. After Luke Devenish had thanked the Hon. Treasurer and Auditor for their efforts the accounts were adopted. A sum of £30 was voted for the Hut Sinking Fund.

Officers and Committee for 1957 -58

President, Mr. H.E. Balch;

Vice-Presidents, M. Norbert Casteret, Mrs. D. Dobson Hinton,
Prof. L.S. Palmer, Dr. E.K. Tratman and Dr. S. Wallis;

Chairman and Hon. Treasurer, G.H. Williams;

Hon. Secretary, F.W. Frost;

Gear Curator, J. Swithenbank.

Committee:

L.W.E. Devenish, P. Davies, Cdr. P.B. Lawder, D. Warburton,
D.A. Willis, Mrs. B. Willis, R. Woolley, N. Tuck and T.H. Stanbury.

Mr. C. Howard Kenney was unanimously appointed Hon., Auditor.

New building for Headquarters

During last year the chicken house at Hillgrove was blown away and its replacement was next discussed. The Hon. Secretary pointed out that a new building was required, not only for oddments but for members' boxes. Moreover if the tackle could be transferred to the new building, four bunks for women could be inserted in the existing tackle hut. In this way the Club could achieve its long-standing resolution to provide separate sleeping accommodation for women. Harry Stanbury told us that a concrete hut with 3 in. concrete floor, 7½ by 10½ ft. would cost about £40. Robert Woolley told us that a slightly larger wooden hut (8 by 12ft.) would cost about £45 including delivery. A portable penthouse (5 by 3 ft.) for the Elsan would cost £8. 10s. In favour of the concrete structure was cheaper upkeep and perhaps greater durability. In favour of the wooden was its greater ease of assembly and (if necessary) of transference to another site. The difference in cost was not significant.

Phil Davies urged that the buildings should be all under one roof and not separate scattered entities. There was much to be said in favour of building on to the end of the main hut. To do so on the same scale as the existing building with its wide roof span would, the Hon. Secretary said, be too expensive. It was eventually proposed that the incoming Committee be asked to get on with the job and the Meeting authorized them to spend £50 of Club funds on the project. The Meeting concluded at 5.45pm.

HON. SECRETARY'S REPORT FOR 1956 - 1957

37 new members joined the Club during the

year; 17 members of the previous year did not continue their membership and there was therefore a net increase of 20, bringing the total membership to 234. We have 11 joint memberships, but the number of affiliated clubs was reduced from 11 to 7.

Club Trips. Early in the year we tried the experiment of running special trips for beginners, under the leadership of Richard Kenney. We intended to run the usual Easter trip to Yorkshire, but this fell through due to the lack of support. The Committee also discussed visits to Devon, South Wales and Derbyshire, but nothing came of it. On the other hand members were very active on Mendip and elsewhere, and the Journal has contained articles covering some of these activities. Dennis Kemp and his associates have continued to make fresh discoveries in Swildon's Hole. This is not Wessex work, but some of our members gave him valuable assistance. Members took a major part in the re-opening of Pen Park Hole, and also constructed the 80 ft. ladder for use on the drop into the Main Chamber. Denis Warburton, Phil Davies and Harry Stanbury are still working on the survey of the cave. During the year the U.B.S.S. tightened up the arrangements for visits to G.B. Cave, but the Guest Days still continued to be very popular with members.

There seems to be very little digging activity on Mendip, although Robert Woolley and his party put in some time at Barrow Rake. It would appear that promising sites for cave digs are becoming rare, and the time may not be far off when we will have to rely on modern scientific methods such as Prof. L.S. Palmer's Geo-Megger to locate new caves.

The cost of producing the Journal shows a reduction on the previous year, due to "bulk

buying" of covers etc. This is very satisfactory, but we should mention that the new postal charges makes it necessary to keep down the size of each issue to 24 pages. Six issues were sent to members, and we think it can be fairly stated that the Journal has been well received. It has not been easy to get it out at the correct time, and the September issue was particularly late. This was due to clashing with holidays. We investigated the possibility of getting it done professionally but this would have cost the Club over £20 for a single issue, so we decided to delay the date of publication.

Tackle. All the metal tackle has been re-made, and we had to replace every metal tether as these had disappeared from the tackle hut. Two wooden ladders were damaged during the exploration of a mine shaft, and had to be destroyed. We mentioned in last year's Report that we were investigating the possibility of using a new method of ladder making, and the result of field trials with the crimping method has convinced us that this is a satisfactory way of making ladders. In an effort to increase the useful life of metal tackle we have treated it with a special oil, but of course, only time will tell us if there is any marked improvement.

Hillgrove Hut. The hut will soon be supplied with electricity, but we intend to let members have the choice of cooking by the Florence stove or by using electricity. If the former method is used the Club will cover the cost of paraffin, but we are fitting a slot meter for the electricity. The hut is in regular use, but again we have to report a certain amount of slackness by members in locking up. The hut warden regularly finds windows left open, and in one case

someone left a door unfastened. The Hon. Auditor has called our attention to the fact that although there has, on paper, been a reduction in the number of people using the hut, i.e. the income from hut fees is down, the cost of fuel, etc. has increased. From this it could be inferred that some members have overlooked the payment of hut dues, or that there has been unauthorized use of the hut. Most members will have read in the Journal of the stolen hut fees, and it maybe that there is a connection between the carelessness in locking up and the missing money. We have now fitted a locked box for the hut fees.

Library. This is now kept in a locked bookcase at Hillgrove. Very few people have asked for the key when making hut bookings, but on at least one occasion members or their friends forced the lock of the bookcase. The library has grown in size since Richard Kenney took on the post of Librarian, and we will now require another bookcase, the problem being where to fix it in the hut. The subject of the enlargement of the accommodation at Hillgrove will be discussed later at this meeting.

Club Suppers. We held two suppers at Hillgrove during the year, and both were a great success. As will be appreciated the accommodation on these occasions is limited, but we managed to cater for 21 the first time and over 25 the second. We plan to hold at least two during the coming Club year.

We were all very grieved to learn of the death of Bob Sellers in a car accident. He will be greatly missed by all who knew him.

The Club is indebted to a number of members for their help during the past year. First and foremost we must mention Robert Woolley, who not

only worked very hard at his job as Hut Warden, but helped with the Journal, tackle and in many other ways. Robert has the Club's interest very much at heart. Oliver Lloyd continued his good work on the Journal, and Jim Swithenbank not only did his job as Gear Curator, but was a tower of strength when the two monthly issue of the Journal came around. Cdr. Lawder constructed the bookcase, and also made the Club a gift of a vacuum-cleaner for use at Hillgrove. Mr. Sealy has in many little ways shown himself to be a good friend of the Club, and we must make special mention of Norman Tuck who made it possible to hold the Club Suppers by providing the where-with-all for the meals. He has also helped in many other ways. Harry Stanbury has taken on the job of installing the wiring and fitting at Hillgrove. We are indeed grateful to those we have named and to all members who have given us assistance during the past year.

Frank Frost

A REAL SECRET PASSAGE?

Wherever I go to do an excavation, it is only a matter of time before someone comes to the hut and tells me confidentially about a secret passage which runs under, or away from, the site. It has usually been explored by the informant's aunt's grandfather when a boy; at first I was mildly interested, and made half-hearted attempts to find it, but now I resolutely change the conversation. (If anyone is still open to suggestion, there is a fine one from Compton Martin Church to Moat Farm which was explored by Jack Tassel some 40 years ago with candles taken from the altar; he chiefly remembers the vicar's

wrath when he re-emerged).

In November, however, I am actually starting an excavation to find a tunnel, which sounds too good to exist. It is at Old Sarum, the great Norman fortress and mediaeval settlement. Here are very large earthworks which are one of the most impressive monuments that the Ministry of Works have in their care. In 1795 (as described in the Gentleman's Magazine of that year) there was a severe and prolonged frost followed by a thaw. Some "gentlemen" of Salisbury, visiting the site shortly afterwards, found the entrance to a tunnel exposed, the arched opening having fallen in. Exploring it with candles they found it was 8 ft. in diameter, cut in the solid chalk, with steps descending at an angle of 45°. They went down for no less than 120ft. before the shaft was choked with rubble. They conjectured that it was an escape route from the castle into the outer ditch. It could not be dug further, as "Farmer Whitchurch" did not want his grazing disturbed, and filled in the hole.

It seems strange to me that no-one has tried to re-discover this before, especially during the lengthy excavations of 1909 - 1916, when the castle and cathedral were thoroughly explored. The point has now arisen in connection with the compilation of "A History of the Kings' Works" and the Ministry have suggested a short dig to see if the tunnel really is there, or is the product of a vivid 18th century imagination. In the next issue (if I haven't been buried alive) I shall describe the results of the dig, together with details of dead Normans in full armour, dead archaeologists etc.

P.A. Rahtz.

SWILDON'S IV Part II

(Continued from page 262)

An exciting moment came on 18th May 1957 when, after some hard work clearing rubble, Phyllis Davey said she could almost reach the right hand bend. The next week end we cleared away the remainder of the rubble and I squeezed along until at last I could see round. It was a tight fit but worth it. I reported that the passage continued for about 15 ft. (I couldn't see any further). Immediately round the bend it got bigger, relatively, but there might be trouble from two bumps on the walls. I shouted and a pretty good echo came back from the unseen streamway. They even heard it back in the Pot. Work was continued on similar lines by Len Dawes and me during the two week ends before Whitsun.

Thanks to the courtesy of Mr. Maine, we were allowed to camp in the field by the entrance to Swildon's, and this proved really worth while. David Newman was appointed Camp Manager and, with the help of some lads from his Scout troupe, got the various parties away on time: a not unimportant point, when the whole object of parties going down at different times was to avoid the time-wasting queues at the various pitches, squeezes and crawles en route. And then, when muddy and tired parties finally surfaced, there would be tea ready in an instant, and someone to help you off with your kit, and even to clean it for you ready for the following week end. We were very strict about the no-carbide rule, and obtained some spare electric sets for loan to those who didn't have them. The laddering party of three would bale the stinking pool in Balch's Grotto and the Mud Sump and then surface, where they held themselves in readiness as a rescue party should the need arise. Thus the working party was able to put up some record times for the trip to the dig.

"CHOS" (the Land Rover) arrived just before midnight on Friday 14th June, and we camped in the Swildon's field. David Newman had the tents up and we were in bed within a quarter of an hour of arriving. We knew we might be lucky enough to get through, and in the morning there was a certain excitement in the air. A heat wave was on, and at 9.15 on Saturday morning the laddering party disappeared into the cool of Swildon's. The Second party went underground at 11.05 and the third at 11.30. I travelled solo (it was grand to make a non-stop trip). The pool was reached just in time to help bale out the last drops of water. Mud Sump was dry from the previous week end. Up the greasy chimney without falling down it, for once. Past Base Camp and straight down Blue Pencil Passage after shorting the ends of the firing leads at the entrance.

Les Mortimer and David Newman had made an excellent job of laying the bang wire well out of the way of even the clumsiest caver. At the Pot I looked at my watch (I keep an ordinary Smith's wrist watch for the mud and wet of this cave and it thrives on it. Still keeping to a steady acceleration of fifteen to eighteen seconds a day after two years' misuse). I had taken 55 minutes on the descent, but elsewhere in the cave were friends struggling with packs, losing their way perhaps, thinking of the ladders they had put in. It was their hard work that allowed extra working time at the dig, so I buckled down to the work in hand.

Two sticks of bang were gently placed in position, and the firing leads cut well back and a detonator wired up. I checked the circuit at the bottom of the Pot, went out to Base Camp and fired the charge. A satisfying whomp followed and I went to start the Primus to get a brew going for the support party who were, I hoped, hard on my

heels. But I had no matches. Mistake! I sat in the dark for twenty minutes and then went halfway down Blue Pencil Passage. Here were thick, slowly drifting layers of smoke from the blasting, so I retired quickly. The fumes can give a really nasty headache. After a considerably longer wait in the dark, which turned out to be only ten minutes, I cast around for some method of producing fire. At my disposal; two Miners headlamps, a tin of meths, ditto of paraffin. Box of matches, muddy and very wet, 1955 vintage. Two detonators. An Optimus stove that had, poor thing, been working under these conditions for two and a half years without complaint.

I soaked a bit of rag in meths and paraffin, made a pool of meths in the floor, inserted an electric det and retired behind a convenient corner. This resulted in a pleasant bang but not a glimmer of flame. So all I could do was sit in the dark again. The others soon arrived and after a quick cup of tea we found that the fumes had dispersed in Blue Pencil Passage and so we went all the way down. It looked suspiciously as though some gelnite had not exploded but had been spattered all around. There is a song describing the effect, I believe. Traces of pink stuff were all over the roof, walls and floor. My fears were confirmed when five minutes later the first fierce stab of a headache came. The nitroglycerine content of gelnite is rapidly absorbed through the skin if it is handled and gives you the king and queen of all headaches.

There was a good deal of stuff to clear away from the right bend. I lay on my right shoulder and reached forward with my right hand for rubble. Transferred this to my left which I could move back in an arc until Dorothy Walker behind me could take a handful and put it in a kitbag. When the kitbag was full, Dorothy would push and Phyll

Davey, just behind, would pull, and Tom Andrews and David Robb would haul on a rope and it would be hauled up to the Pot. This was our procedure for some eighty minutes during which time my headache got worse and worse. The others all had splitting heads too. It was nice just to lie very, very still but not a practical way to explore a new cave.

When nearly all the available rubble was out, and I realized the evil moment could be put off no longer, I looked at the corner and the squeeze beyond for a long time, making up my mind to have a go at it. I don't like squeezes. I started to feel sick and put it down to fear. Just round the bend, the left wall of the passage bulged out. Beyond that the right wall in turn bulged out. There seemed two ways through, high up in the roof, or down on the floor. I went back to the Pot and took my pullovers off. Finally I took the high level route, and the first push was easy, but then it started getting tight, really tight, and I tried hard not to think of the Cheltenham incident I had recently read about in the Wessex Journal. I remember deciding that I was so far in there was no hope of getting back, and pushed very hard with my feet. I couldn't get my knees round the corner. I wondered what Oliver Lloyd would say when summoned to get me out: and asked Dorothy to come up to dig away some of the rubble under my foot if possible. This proved to be an extraordinarily intricate manoeuvre, but when completed gave that extra half-inch to play with. After some strenuous kicking I sank with relief into a little pool of water just beyond the squeeze.

Twenty-four feet of blasted passage in two years. A sparkling rate of progress only excelled by Britain's road construction programme.

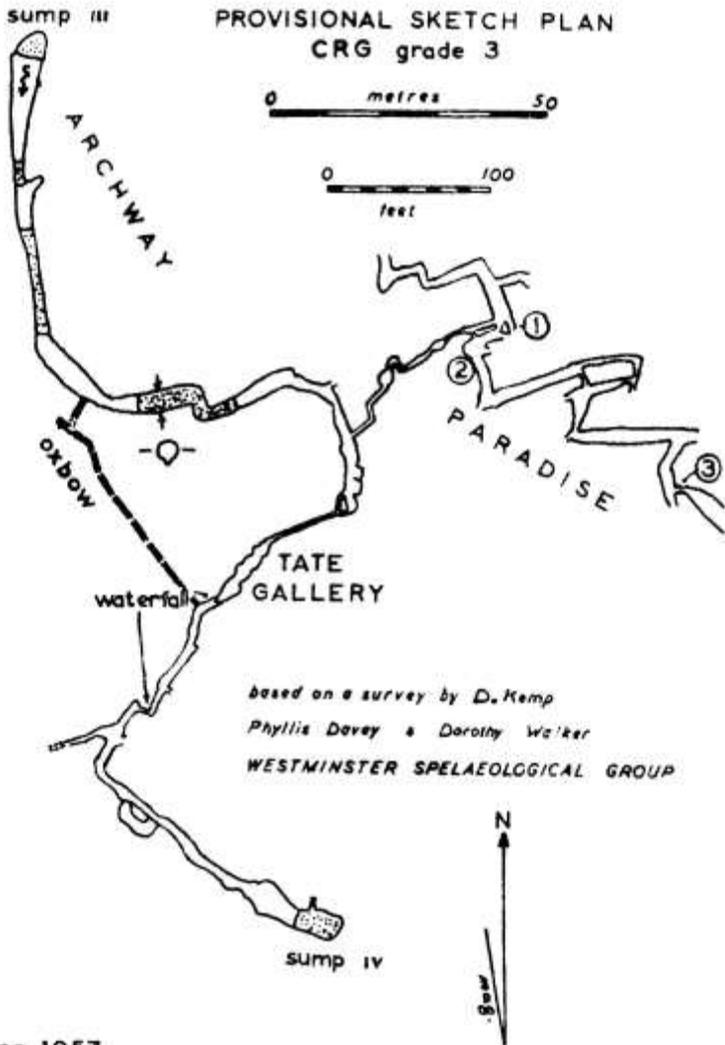
Dennis Kemp

SWILDONS FOUR

PROVISIONAL SKETCH PLAN
CRG grade 3

0 metres 50

0 feet 100



based on a survey by D. Kemp
Phyllis Davey & Dorothy Walker
WESTMINSTER SPELAEOLOGICAL GROUP

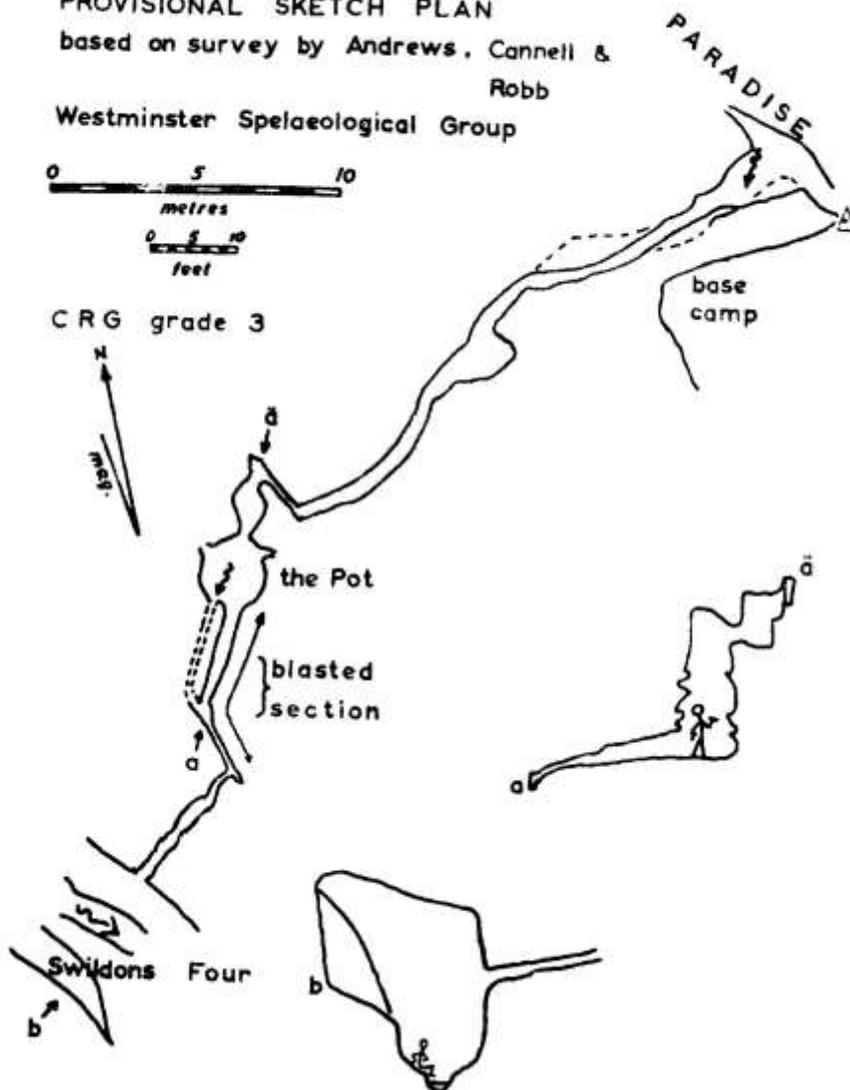
© D Kemp 1957

BLUE PENCIL PASSAGE

PROVISIONAL SKETCH PLAN

based on survey by Andrews, Cannell &
Robb

Westminster Spelaeological Group



© D Kemp July 1957

MENDIP NOTES

It had to happen!

Under the heading, "CAVE RESCUERS RESCUED", the Manchester Guardian of Monday the 23rd September carried an account of a practice rescue in Giant's Hole, Castleton, which turned out to be the real thing. The previous Saturday a party of three had been sent to bail out the sump, so as to facilitate the work of the practising team on the Sunday, but finding more water there than they had expected they had gone off to explore some of the upper passages and had got lost. When the main party got through the sump the advance party was nowhere to be found. After searching for four hours they launched a full scale rescue in earnest and at 3 pm. found the advance party, cold, wet and hungry, after 16 hours underground.

When is Stoke lane safe?

The straws in the roof are enough to tell any caver that the stream passages fill during floods, but the first place to become impassable is the sump. When I visited the cave in February it had been very wet and the air-space on the far side was only three inches. This made it necessary to move smartly about 3 ft. to the left, where the roof gradually slopes upwards. On our return at midnight the water had fallen two inches, partly because of frost outside.

Tony Morrison visited the cave again on the 3rd November, when it had been very wet, and found water running over the Pebbly Crawl, which is nearly always dry. When he reached the sump

he could find no air space on the far side, and reckoned that if he had passed it, he would then have had to move about 6 ft. to the left before being able to take another breath. The difficulty of finding the sump on the return may be imagined; it is hard enough when the markers are submerged. Needless to say he left it alone. I think it may be taken, therefore, that when water is flowing over the Pebbly Crawl, one might just as well turn back right away: the sump will be dangerous.

Cheramodytes

BOOK REVIEWS

THE DESCENT INTO THE CAVE AND OTHER POEMS,

by James Kirkup. (Oxford, 1957), 12s. 6d.

A stocky young man with fair hair and blue jeans, he came and stayed with the students for a week end at Burrington in the summer of 1954. He wanted to go caving, so as to have a new experience to turn into poetry. We took him down G.B. Cave, first of all, and as he stood this pretty well, we thought we would take the micky out of him by a Stoke Lane trip the next day. This left him quite unruffled, which made us think that he had in him the makings of a good caver. We asked him to come again, but he never did. He had acquired the experience he wanted.

His poem, "The Descent into the Cave," was first broadcast on the 25th September 1954, and is one of the few examples of cave fiction (if one may use that term) of which I have always heard real cavers approve. It has the added advantage of being good poetry. I particularly recommend his description of what it feels like to go through a sump for the first time. The poem was first published in an anthology called "From the Third Programme" in 1956

and has now been republished in a more convenient and less expensive form along with some other poems by the same author, James Kirkup.

O.C.L.

CAVES OF MISSOURI, by J. Harlen Bretz. (Missouri, 1956). (Division of Geological Survey and Water Resources, Vol. 39, Second Series). 552 p., maps, plans, illus., bibliog. £1. 3s. 6d. (\$2.50)

The author, now 75 years old, is Professor Emeritus of Geology at the University of Chicago and he is known to cavers as the writer of one of the most famous papers on cave formation (*Vadose and Phreatic Features of Limestone Caverns*; *Jour. Geol.*, 50: 675, 1942). His new book is not just a guide book to the caves of one American state (an equivalent of "The Caves of Mendip"); he himself says, "the leading theme of this investigation has been the interpretation, from cave features, of the past succession of geological events in cave-making in the Ozarks."

After an important introduction he describes 39 commercial caves and 417 "wild" caves in the state of Missouri. The commercial ones are described in more detail because the required study could be made there more easily and in less time, than where special effort had to be made in exploration. Many of the "wild" caves were not visited and provide no material for the main study, but they have been listed, with some information collected from other sources.

The introduction on cave formation is concise, lucid and logically presented, but not so simplified as to be incorrect. It is shorter than the main paper of 1942 and hence simpler for a first-time reader to grasp.

English readers already have a similar introduction to the subject in "British Caving", where the theory is compared with possible alternatives. At first this introduction promises to be of particular importance in showing how Bretz has modified his ideas in the 14 years since he published his main paper. Its value in this way and as a resume of the theory is reduced, because the author has written from a purely Missouri point of view; he ignores all the evidence which does not occur within this state. Thus he writes, "(In 1942) the writer published a description and an interpretation of seven different repetitive features which he considered to be criteria for establishing the phreatic origin of caves having those features. At least two more have been discovered since then." But, thus tantalized, we are not told what these new criteria are; for the six listed for Missouri were all given in the 1942 paper. The one mentioned then but not quoted for Missouri is the presence of ceiling half-tubes (the vadose ceiling channels on pp. 22 - 23 are quite different).

Unlike Swinnerton, who held that flow of ground water took place on or a little below the water table, Bretz maintains that much of the flow is quite deep-seated and comes to the surface again under artesian pressure. In "Caves of Missouri" he goes into this further and gives evidence which was not used in the 1942 paper. A shorter part of the introduction deals with calcite formations. Bretz ignores the modern American terminology sponsored by the National Speleological Society ("speleothem", "anthodite", etc;) but he does apologetically and regrettably include "stalactiflats" from the language of cave management. This is not a book to be read straight through from beginning to end, perhaps not a book for the general caver at all; but to look at it makes anyone think.

Many of the photographs are excellent and for its kind it is a remarkably cheap book.

T.R.S., 9th Oct., 1957.

BOOK NOTICES

MAN'S JOURNEY THROUGH TIME: A first step in Physical and Cultural Anthropochronology, by Professor L.S. Palmer, D.Sc., Ph.D., Hon. Curator of Wells Museum, Vice President of the Wessex Cave Club, Hutchinson Scientific, London, 1957, 199 p., illus., diagr., index, £1.10s.

UNIVERSITY OF BRISTOL, PROCEEDINGS OF THE
SPELAEOLOGICAL SOCIETY, 1956 - 1957,

Vol. 8, No. 1, Sept. 1957. 68p., maps, illus., diagr., 7 surveys, from the Hon. Treasurer, Spelaeological Society, Univ. of Bristol, 10s.

Contents include reports of: The Priddy Circles, Little Solisbury Hill Camp, Kings Weston Down Camp, Caves in Co. Leitrim.

Reviews of these two books will shortly be published in this Journal.

All material published in this Journal is

All manuscripts should be sent to:
Frank Frost, 22 Wolseley Rd., Bristol, 7.