

[March 1965]

UNIVERSITY OF BRISTOL SPELEOLOGICAL SOCIETY

CIRCULAR TO MEMBERS 15th March 1965.

ANNUAL GENERAL MEETING

This was held on March 8th 1965. The

following officers were elected:

President , E.K. Tratman, O.B.E., M.D., M.D.S., F.S.A. Vice-Presidents:
H. Taylor, M.B., Ch.B., Dina P. Dobson-Hinton, Litt.D., F.S.A. B.A. Crook,
M.B., Ch.B., D.T. Donovan, D.Sc., Ph.D,
Hon. Joint Secretaries: M.H.P. Green, M.G. Norton. Hon. Treas., O.C. Lloyd, M.D.
Members of Committee : D. Ingle. Smith, M.Sc., I.J. Standing, G.B. Wood,
C. Barrett, H. D. Donaghue, P.J. Johnson,

Members SUBSCRIPTIONS.

Enclosed with this circular is a note from Dr. O.C. Lloyd for each individual member, on the matter of subscriptions.

TREASURER'S REPORT (1964/5)

From the Income and Expenditure A/c it is seen that the bill for Proceedings was £494, of which the society payed £394, and the University £100. The Royal Society gave us a grant of £50 for Derek Ford's G.B. paper, and a donation of £25 left a bill of £319. This may be considered to have been derived thus:

Members subscriptions(not more than 3/4)	£75
Colston Research Society	£50
Donations	£20
Interest	£20
Sale of Publications	£123
	<u>£288</u>

This leaves a short-fall of some £30, which has been taken from the capital in the Printed Publications Fund.

Due to Proceedings increasing in size as well as quality over the past years, the capital of the fund has been steadily drawn upon to meet the cost of printing, a reappraisal of the means by which we pay for Proceedings may be necessary. Anyhow the Colston Research Society has raised its grant for next year to £80, the first rise since 1957.

Tools and Equipment at £34 has been offset by donations of £29 to pay for the ladder(200ft) made by Dr. Bernard Chapman. Secretaries' petty cash is more than usual, but Stationery and Duplicating is less. Two secretaries spend more than one because they do extra jobs such as cutting their own stencils and making copies.

G.B. Cave tackle expenditure has been swollen this year by £21 of legal expenses in connections with the society's sub-licence from the C.C.C. The University Union has taken the unprecedented step through its Audit Sub-Committee of fully reimbursing the society for this.

Sale of publications is a little down on last year's record, so are Members' subs. We now have 79 ex-university members at £1/10- and 15 elected members at £2p.a. We have 4 Honorary members; and six members did not pay their subs., three have resigned and one (Dr. D. Ince Jones) has died. There are five new members. Next year should bring in £148/10-.

On the Balance Sheet the Hut Replacement A/c grows slowly. The Break Down Publication Fund is waiting for Arthur ApSimon's account to appear. The War Damage A/c has been raided to buy new Museum cases. The library will need a bit of support. The Income and Expenditure A/c is our cushion, which enables us to meet abnormal expenses on other items. Our investments stand at £750, earning 5%p.a. We finished with a small bank balance and a minute sum of cash in hand. Dr. Oliver Lloyd.

PICKEN'S HOLE

In our last Circular the note on the significance of the findings at Picken's Hole got a little scrambled in the Christmas rush. Fortunately we have received the following communications from Arthur ApSimon, which more than makes up for this.

1.

General Correlations of the existing Sequence: The deposits record a long period of predominately cold, peri-glacial climate. The probability of this is of last (Würm) Glaciation age, if only because deposits of this age are more common than older ones. We can't be certain of this because it is not yet possible to distinguish cold fauna of Würm age from ones of the previous (Riss) glaciation. The Stratigraphy doesn't help here, because the top of the sequence is eroded, so that there is no possibility of linking up with dated layers, as we did at Brean. We do not yet know whether there are datable layers of Interglacial deposits beneath the layers now exposed.

2.

Correlation of the Red Clayey layer (Bear layer):

This contrasts with the other layers in showing no evidence of frost action on the Limestone cliff. Presumably the layer was formed when winter temperatures were not very much lower than at present. Nevertheless, the presence of Reindeer in the layer might suggest that summer temperatures were lower than today. Probably all the animals (Reindeer, Red Deer, Ox, Brown Bear, Wolf, Fox) from this layer could live in a coniferous forest, with July temperatures between 50 and 60F, as in central Sweden today. The thickness of the layer suggests a long period of formation.

If, as was suggested in para. 1, the deposits are of Würm Age, then the required correlative, a long cool-temperate period, is probably the Gottweid Interstadial (see table in Proc. 1961, p. 102). We can rule out the Last Interglacial, as this has a different fauna (Cf. Olveston & Milton Hill, Wells: Straight tusked elephant, Rhinoceros hemitochos, Fallow Deer, Hippopotamus).

3.

Other detailed Correlation: The angular limestone breccia above the red clay may be correlated with the advance phase of Main Würm, and the silty breccia above that with a later phase of the glaciation. It remains to be seen whether there is any Chronological overlap with the silty deposits (layer 12) at Brean Down. Perhaps the only way to find this out will be to have radio-carbon age determinations done on bone from the two sites.

<u>Picken's Hole</u>	<u>Correlation</u>	<u>Approx. age B.C.</u>
Stony Clay	?	?
Silty breccia)	Main Würm	c. 20000
Silty stoneless)		
Sandy breccia	Advance Phase	c. 25000
Red Clay (Bear layer)	Gottweig Interstadial	26000-40000
Cemented breccia	Early Würm	40-75000

4. Cemented Breccia: This represents a major cliff or roof fall, seemingly comparable with the basal rock fall at Brean, though not necessarily of the same age. It is possible that older deposits lie under this. It would be a very worthwhile achievement to find last Interglacial deposits, but it is just possible that there might be much older deposits as well, the site at 150ft. O.D., has been above S.L. for about the last 400000 years.

5. Blocks of mineralised breccia: The blocks of this, which occur in the sandy breccia are Pleistocene, and not Triassic as was first thought (Proc. 1964, p. 112). Similar mineralisation is found in the cemented breccia. The Triassic deposits near the site, marked by the Geol. Survey, are Keuper Marl. The nearest Triassic conglomerate is half a mile away at the head of the valley. The rock exposed at the site is carboniferous limestone, dipping southwards at about 30'. The large boulder at the north end of the trial cutting appears to be composed of breccia, not carboniferous limestone.

6. Present importance of Picken's Hole:

i) Discovery of a long sequence of deposits covering most of the Würm glaciation and so going back much further than the Brean Down Sand Cliff.
 ii) Discovery of a weathering soil of Gottweig interstadial age. This has not been done before in Britain, though two sites of this age are known (Upton Warren Worcs.; Torbryan, Three Holes Cave, Devon). The Upton Warren site belongs to the beginning of the interstadial, and the fauna is different.

7. Future Work

i) Completion of the excavation of the present cutting down to the top of the cemented breccia. The aim of this is the further study of red clay and its fauna. This will be a matter for trowelling.

PICKEN'S HOLE :Cont.

ii)

Excavation of further cuttings down the slope to the north. The aim of this is to break through the cemented breccia to investigate what lies beneath. This will be very hard work, but it may be possible to start at the downhill end, where the limestone is covered only by reddish brown clayey soil.

Both these tasks may be tackled at the same time if sufficient labour is available.

U.B.S.S. TRIP TO YORKSHIRE AT EASTER.

A trip to Yorkshire, lasting from Good Friday to Easter Monday, has been arranged. The programme is as follows:

Good Friday	Grange Rigg (booked)
Saturday	Alum Pot (booked)
Sunday	Magnetometer Pot (booked).
Monday	Whatever people want.

Accommodation has been booked at the New Inn, Clapham for 8 people. Alternative Hostel accommodation also being available.

Transport

T.J. Hill is going from London, so anyone wishing to go from there should contact him.

Dr. O.C. Lloyd will be leaving from Bristol on Thursday afternoon. Those wishing to go with O.C.L. should contact him very soon, stating accommodation required.

GENERAL NEWS

Dave Patmore, our former Mic Phot., is getting on quite well at Edmonton University as a postgraduate, although he seems to be sorely disillusioned with Canadian Pubs and beer: one's name and address has to accompany every order and if one doesn't have proof that one is over 21, then the store policeman is liable to throw one out! However Dave is still caving out there, having done Alberta's one and only cave. The cave was 1500ft long and hardly justified the 200 mile journey to get to it.

CAVING ACTIVITIES

Much progress has been made in the past few months in the discovery and exploration of the further reaches of Swildon's Hole and Stokelane Swallet by the use of diving equipment.

Stokelane Swallet

At the beginning of the year sump 4 had been entered, but Stoke 5 had not been reached. Since then rapid progress has been made with the use of diving equipment. Sump 4 proved to be about 40ft long and quite tight

leading to Stoke 5, which led through 300ft. of passage to Sump 6. This sump required a certain amount of underwater digging before a route into Stoke 7. was opened. 500ft. of exceedingly unpleasant passage leads to the inevitable Sump 7 where progress has been halted for the moment.

Swildons Hole

As with Stoke Lane, further downstream progress has been made in this cave. The last major attempt to 'push' the streamway was by the C.D.G. in 1962, when Mike Boon managed to pass the exceedingly tight Sump 7 into Swildons 8. Further progress was halted by the fact that no-one else could get through Sump 7 until early last month, when members of the Society attempted to enlarge it by means of explosives. On Feb 27th. Mike Wooding went to examine the result of the bang, and found the sump passable without undue difficulty. He also passed Sump 8, and became the first person to enter Swildons 9. The following weekend three members attacked the sump at the end of Swildons 9 and reached Swildons 10 after 130ft. of underwater passage at a depth of about 20ft. Swildons 10 is very short-20ft., and a short sump of 2ft. leads to Swildons II, which consists of 80ft. of roomy passage leading to Sump II. This sump looks easy to dive, though there appears to be a by-pass at the top of a steep climb adjacent to the sump, through which the sound of running water can be heard.

Perhaps as an outcome of these diving breakthroughs, many of our members have taken to free diving some of the longer sumps in Swildons Hole: namely sumps one, two, four and five: even sump three has been free-dived by some. The classic example of one such trip was, of course, that made by Mike Garrett with Oliver Lloyd, when they followed the divers through sumps one, two, three, four and five. It cannot be too strongly emphasised, of course, that free diving, like diving itself is a potentially very dangerous pastime, and is not to be recommended to anyone who regards sump one as anything more than a means of getting wet. Even then it is only common sense never to go with someone who has been through before.

PROGRESS IN G.B. CAVE.

The digging in the Ladder Dig grotto is continuing at the far end of the chamber. After some blasting, to remove obstructing boulders, sandy deposits have been reached, and digging is progressing through these underneath a calcite floor, similar to that in the entrance crawl. The total progress to date is some 25ft of quite roomy dug passage. We should be quite near the bottom dig by now (probably about 30ft) but a survey is needed to establish the true relative positions.

MANOR FARM

A recent visit to Manor farm found that the shoring was reasonably intact and safe; also very little collapse has occurred, the dig being approximately the same depth as during the summer. In wet weather the stream enters at the base of the pipes and flows away rapidly at the bottom into a small chamber and disappears through a small hole at the far end; as yet the chamber is too small to enter fully.

This is the first year ever that the dig has remained intact during the winter, and as the stream is washing much of the loose clay away, progress has actually been made! The prospects for rapid progress and perhaps drastic discoveries are thus very good for this year. As usual most of the digging will be done during Union week and afterwards, and if any old members are free during that time, there would be plenty to do and their help would be much appreciated.

RECENT ACQUISITIONS

The recent bi-monthly magazine 'The Speleologist' was taken for the first issue only. It has yet to be decided whether to continue the order.

ARCHAEOLOGICAL DIGGING.

The site at Charterhouse (Roman) will be excavated again over Easter: Director, C. Barrett.

Work will be continued at Picken's Hole during August: Director Arthur ApSimon.

Help at either of these digs would be welcome. Apply - C. Barrett, Speleological Rooms etc., for the Charterhouse site, and Dr. R.E.K. Tratman for the Picken's Hole site.

Signed

M.G. Norton
M.H.P. Green,
Joint Hon. Secs.