





AGM and DINNER 1972

The 53rd AGM of the society was held in the Geography lecture theatre at 3 pm on Saturday March 11th.

The minutes of the last AGM were read and approved. The Hon Secs and Treasurers reports for the previous year were delivered and a vote of thanks was made to both.

Election of Officers:-

Professor R.F. Peel (dept Geography) was elected president, following the resignation of Professor Tratman.

Vice president: Drs Crook, Taylor, and Donovan, and Mr A M Apsimon.

Senior Treasurer: Dr O C Llyod.

Secretaries: Tony Boycott and Steve Warr

Student treasurer: Graham Mullan

Committee: Charlie Self, Hywel Thomas, Pete Godfrey, Andy Friedman, Loraine Knowles, and Sue Barber.

A silver salver and glasses were presented to Prof Tratman as retiring president in appreciation of his outstanding services to the society. He then gave his valedictory address on the Hydrology of the Coolagh River System (Co Clare).

The dinner was held in the Star Hotel (Wells) after the AGM. Over 40 members and guests were present. A fine meal and enjoyable evening were had by all, enlivened by Dr Crooks after-dinner speech and Oliver Lloyds punch and judy show.

The UBSS Librarian is once again Adrian Wilkins. Could all clubs with whom we exchange journals and newsletters please note. The address is: The Speleological Society, The University, Bristol 8
Please do not send material to the Union.

We are pleased to announce that the "Caver of the Year" program mentioned earlier in this column has once again shown Julian Walford to be well ahead of all other contestants for the third year running, after suitable weighting of the factors involved. (The editor believes this is testament to JDW's programming abilities rather than his caving scene).

The program mentioned last issue is now well advanced to cope with most types of junctions. The drawing of CRG symbols has been considered seriously enough to produce a standard control system, but the only symbol to appear on paper yet is the "north point". This seemed to have a mind of its own for some time when it was difficult to see the cave survey for the northpoint, but this fault has been rectified. Care will have to be exercised to prevent several yards of output covered with "stalagmite flow" if it turns up again!

Traverse closing: the current programs use a system of station numbering such that every station in a survey is uniquely defined between the (present) limits 0 - 1000. If at any time such a station is re-encountered then the current traverse is closed to it. This definition of the current traverse has confused some outsiders sending us data, often giving a false closure. For instance if a survey entails a closed loop with several branches off it, then to distribute the misclosure round the loop evenly the data has to be submitted with the loop as an un-interrupted traverse, the side-traverses following later. This drawback has already entailed re-organising and repunching a huge amount of data. In an attempt to take sophistication one stage further current developments are centering on an algorithm which holds in a "connectivity matrix" a complete record of the cave system's junction points, and only when all data has been read does a closure take place. Given this, a least-squares algorithm may then be applied to minimise all misclosures over the entire cave. This has been the dream of many for years, and should be working in a month or two. Only a mere quarter of a mega-byte seems to be required!

A new angle of approach has been taken on the subject of survey plotting - that it is a communications problem in that the line survey may be regarded as a "sampled version" of the information actually

present (ie the location of the passage in 3 dimensions). One must therefore take enough samples (= survey stations) to accurately describe the passage, but, working on the assumption that surveyors are perfect if a little noisy (inaccurate) reproducers of the cave system, then the computer may be used to re-construct the cave with no loss of information. The result is satisfactory in general, but when plotting at small scales (less than 1:500) the assumption is unjustified. This shows itself in drawings that are un-naturally smooth. A solution proposed is the inclusion of a random source of "noise" to modulate the wall points to give a realistic roughness, though no relation between this noise and the wall/floor/roof dimensions has been justified. Any added complexity will represent an added programming difficulty in terms of calculation time, plotter time, and store space, and it remains to be seen whether this can be added. One would expect that for a given run at a given scale, the "wall shift" would be solely a factor of the passage width. The noise generator itself would have to return digital noise of a band limited type (digital filtering etc.).

In all there is a long way to go for computer applications in this subject. One can envisage the ideal of a suitable fourier transform representation on the plotter which on photoreduction could be laser illuminated to provide a 3-dimensional display. To produce such a "hologram" one must work with distances of the order of the wavelength of light - less than 650 nm. A calcomp plotter can work at an increment of 1/100 inch or 300 microns, and so a reduction of 1:500 is probably required. Even using the full metre plotter width the final photographic plate would only be a mm or two in diameter, but this does represent a resolution of better than 10^4 - i.e. the passage would be defined to better than 0.1mm in a display of 1 m. One can quickly see that limitations will not be those of the peripheral device (even though the graph would take 10 hours to draw) but on the store space necessary for the diffraction pattern transform. Thus the concept does not seem a terribly useful objective for future UBSS programmers to work to.

Lastly one may perhaps mention that Adrian has been awarded computer time to the tune of £1000 in the recent New Scientist/Honeywell competition. This should give a good start to the proposed studies in "a block of digital limestone" - a computer simulation of the processes of speleogenesis.

The Hardware Scene by our tackle master and others.

As most members know the "speleo rooms" was the site of the theft of a substantial amount of caving ladder before Xmas. Every attempt at tracing the same has failed. A small reward (who wants a new wet-suit?) is offered to anyone giving information leading to the recovery of this ladder, which is easily identified by its characteristic manufacture (double tapered alloy crimps* on stainless 0.12" diam wire). The end rungs (now doubtless removed) had on them stamped UB53 and their length - 25 or 50 ft. Some of the end "tellurites" would have been of copper.

* Wings from crimping not removed.

Financial Year and Annual General Meeting

Treasurers' note to members:- 11.5.72

The University Union has asked us to make our financial year end on March 31st instead of on Jan 31st as at present, so as to bring the society into line with all the others. This matters to them because they normally pay Union grants in two halves, the second of which may not reach our present deadline, unless they pay it early, which may inconvenience them.

In order to comply with their wishes it will be necessary to have our annual general meeting in May instead of in March, so as to give time to prepare audited accounts and present them for approval at that meeting. This will need a constitutional amendment which, with members' approval can be passed at a special meeting next term called for that purpose. We are asking for your approval. Our auditor has said he can manage the change. It will not be necessary to alter the date upon which annual subscriptions become due, which will still be March 15th.

OCL & GJM

A note from the treasurer (yes, another one!)

A copy of the society's accounts, adopted at the AGM in March, is sent to you with this circular. It is not as bad as it looks. The "deficit for the year" is entirely due to the fact that we borrowed £137 (shown on the balance sheet) for the purpose of republishing our Porth-yr-Ogof paper, which at 25p a copy, fully illustrated and with maps, is proving a best seller. The loan will be repaid in due course from Sales.

Cost of Proceedings has been self-balancing as the following analysis shows:-

<u>Total cost</u> of Proc 12.3, including postages	<u>£1034.10</u>
<u>Income</u> for this-	
University of Brsitol (not in our a/c)	£150.00
Donation	£100.00
Grant from UCL dept Geol	£ 40.00
Part of members' subs (at 75p)	£ 75.00
Refund on covenants (half total)	£ 15.58
Colston research society grant	£130.00
Interest on Printed pubs fund	£ 17.00
Transfer from p.p.f	£ 50.00
Sales (a record!)	<u>£500.69</u>
	<u>£1078.27</u>

The balance of £44 will go towards Proc 13.1

This year for the first time we have asked the Union to defray some of our student members' travelling expenses, which run into scores of pounds a year. The union has very kindly come up with £30 for the second half of last year, and £35 for the first half of this. We are very grateful to them. Half the current and all the capital union grants were paid late, and so appear on our balance sheet as "deptor" £77.50 . I am glad to be able to report that the debt has since been paid. It gave us a very awkward period in January when our bank balance was for a time almost nil.

Members' subscriptions stand at a record level of £171.50 and have been augmented this year by a refund on the covenanted subscriptions of £31.15. The fact that we have this money is entirely due to the energy and persistence of Prof. Tratman. You must thank him, not me. Student members subscriptions at 10p each appear for the first time. The Union is insisting on this, and 10p is the minimum.

On the balance sheet it will be noted that the income and expenditure account is in deficit. This means that we cannot make appropriations from it on account of interest on invested capital for augmenting the hut fund. The GB cave tackle account has been deficit for the first time, due to a marked loss of tackle fees.

Oliver C Lloyd 19.4.72

Trip Reports.

Little Neath River Cave

13 Nov 71. Bob and Julian took the long-awaited maypoles to Inrc 5. Bob managed to float them through the sumps using large plastic bottles of air as floatation, while Julian simply wore no lead weights.

5 Dec 71. A 20 ft maypole was erected in ubbs aven. Julian climbed 55 ft above this knocking down boulders which severed the rope! All ways closed down at the top.

19 Feb. Adrian Julian and Aldwyn went on a long trip to Inrc 5 to try and get up some of the many avens in New World Passage. They had severe problems with flexing of the 45 ft maypole, and there was a distinct absence of pegging cracks. Meanwhile Tony and Tony Giles were diving an inlet passage in Bridge Cave. (See WSG news).

26 Mar Tony, Julian, Steve & Graham made a rare visit to Genesis inlet with a diving bottle to probe the terminal sump. It was dived by both Julian and Tony, but closed down after 7 ft. Roof: phreatic pendants, floor: gravel. Julian's maypole-less climb at the inlet was thoroughly entertaining.

23 April. Julian and Bob to Bridge Cave inlet. There was some confusion as to the number of sumps, and Julian ended up stuck in one which had previously stopped Tony - without a line, and with only 25 ats. When he finally emerged, Bob went in 50 ft and it was still going.

13 May. Martin, Tony and Dave for a photographic and pushing trip. (Is this possible? Ed) They went to the sand-dig in the Northeast Inlet Series, where Martin dug with his boots for 10 ft to reach the previously audible stream. Dimension were 10" high, 3 ft wide (need one say more?) and went (wait for it) all of 20 ft.

Other caves (Mendip/Wales)

4 Dec Bob and Julian to dive Fechan. Julian had valve failure, so Bob went alone through 2 to 3. After 100 ft in 3 both stages of his valve jammed with mud etc. Masochists Paradise!

15 Jan. Ogof Fechan (Fach). On the night of the wsg dinner commotion arose as a non-diver was stuck on the other side of sump 1 due to rising water. Bob and Julian rushed down but the individual was extracted without diving gear. . . . Elitest dinner followed.

22 Jan. Charlie, Carol and Nick went to the "Cheddar Master Cave". This is found 200 ft up a VS in Cheddar Gorge. Apparently two climbers had gone in for "a hundred feet or so" before retiring due to having no lights. On arrival it was found to be 18ft long, and was not surveyed! (Climbers seem to be worse than fishermen - Ed).

6 Feb. Rhino Rift. Tony, Adriam, Charlie, Julian, Graham were the first UBSS members to bottom the newly opened hole. Planning a 3½ hour trip...When they hadn't emerged after 6½ hrs the "MRO warden" was phoned by a twittering bob Taylor. The aforementioned warden (in reality Bob Churcher) went back to sleep; the party emerged an hour later. The entire place was still very loose, and there were definite problems with falling boulders, especially on the 3rd pitch.

4 March. Wookey Hole. Julian and Aldwyn dived to 20 which they proceeded to survey. Survey useless, as the clino was faulty and they didn't get to the end anyway. However the length of 20 seems to be well under a thousand feet, compared to the original Parker estimate of 2000!

Yorkshire.

28/29 Jan. Exchange Swinsto-Kingsdale. Long and festerous. Also 4 diehards down Ireby Fell.

Easter weekend. Fri. A very large party down Lost Johns via the new roof traverse-hammer pot exchange.

Sat. Most went walking; but Dave, Martin, Julian (being, basically, mad,) descended Tatham Wife under flood conditions, finding an NPC carbide-powered party exiting from the first pitch!

Sun. Another large party did a quickie down Marble steps, which was completely transformed by high water levels.

27 Feb. Dubb Cote Cave. This is the most southerly and driest of the Penyghent resurgences. It is therefore probably the oldest and therefore most likely to contain well-developed cave passages. It is 90 ft (but seems longer) to sump 1, which had been previously dived by Tom Brown of Manchester. It is a boulder-strewn bedding-plane sump, and was dived without incident and found to be 200ft long. Dubb Cote 2 is about 200 ft long, and similar to the sump, with the occasional cross rift where one can stand up. Tom Brown had left a line

in sump 2 of about 300 ft. Julian dived to where the line was belayed, noted the depth to be about 30 ft, and returned. Bob then dived with a line-reel of 150 ft and belayed it to a boulder at 300 ft in, before continuing till the line ran out. Returned 20 ft, and belayed at the 430 ft mark. Floor sand and mud, and was beginning to slope up into a large phreatic passage.

They returned the Wednesday before Easter, and Bob broke into Dubb Cote 3 after adding another 170 ft to sump 2. (600 ft long). DC 3 is about 300 ft long, ending in a further sump. A trial free dive found an airbell just inside. Exited without trouble.

New Pasture Cave: Dave Savage Julian and Bob went to look, but had no success. Kitting up has to be done in a flat-put crawl.

GB Cave

The ladder to the Ladder-Dig-Series was removed on Feb 6th. Several miserable efforts at blowing it off at the base with Cordtex failed, so it was hacksawed! The climb is now rather sporting, but 2 bolts have been installed, and scaling is accomplished with etriers (or 2 ends of a ladder) and couple of crabs. The ladder on the 8ft drop in the dry way has also been removed since it was not fixed and tended to overbalance. The duck is still present and frequently needs bailing. Feb 12th Bob Chucher and Brian Butler went to bat passage to investigate a small rift banged over Xmas. BB descended 12 ft and found a small stream (but no way on) at the bottom. 5 March. Rescue Practice from the bottom of the wet-way chain down to Main Chamber, out thru dry-way. On exiting we met 2 BEC members who were rather perturbed at steady removal of fixed aids!

Ffynon Ddu Numerous trips have been down here. The most spectacular was on 29 April when Adrian, Tony, Aldwyn and Charlie went in ofd 1 in flood conditions. The water was 26 inches deep at the step (note: the place is supposed to be impassable at more than 10") making it nearly 3 ft in the stream itself, and going at a hell of a lick. With difficulty at the 4th pot, boulder chamber was reached. Hush sump had all but made the 1-2 through route impassable with only 8" air-space. The streamway upstream from the confluence can only be described as desparate. Several times one of the party slipped into the current and was instantly carried out of sight downstream. Eventually (1½ hours from the confluence) the aven at Marble Showers was reached, and the high-

level traverse route taken to top-entrance. Very sporting indeed.

MANOR FARM

Following a steady decline in enthusiasm over this site, we now have made the dig a joint enterprise with Wessex Cave Club. Attention is being turned to the alternative face. A second railway will be installed shortly.

IRELAND

Easter period. Party consisted of Cyril & Wendy Johnson, Barry Perratt, Brian Ottway, and E.K. Tratman, who spent 8 days in Clare. Objectives: geomorphology studies, water tracing, and a holiday.

In spite of continuous gales, much was done. Water tracing results still not known. Evidence of major glacial deepening of the Coolagh River Valley was found. The water from Pouliskaboy resurgence sinks at discrete swallets a little way downstream. The final destination is probably the sea at S3 (Coolagh resurgence). If so there may be a considerable length of new cave to be opened up. A new cave was found in Td Formoyle East. The entrance was very wet, very low, and very horrid, but it gets bigger inside. Not fully explored. The major submarine resurgence (S5 of 1971) was re-located and a good triangulation fix obtained - about 1 mile south of O'Donohues. Skin diving and fine weather will be essential for its examination. The supply may well be from the Pollapooka-Pollballiny group of caves, for the resurgence is swallet water rather than percolation. Time lag between heavy rain and peaty water observable in quantity at the spring is 12-24 hours.

The party also teamed up with Dave Drew and looked at two of the remarkable caves he has been exploring. One major system has quite long stretches of passage under a large surface river. The resurgence is miles away.

1973 6th International Congress of Speleology.

This will be held in Olumouc, Czechoslovakia, Aug 31 - Sept 18. A strong Bristol-based party will be going, and it is expected that there will be other parties from Britain (which will thus be better represented than at previous conferences). There will be a selection of tours to choose from in both pre- and post conference programs.

If you are interested please inform EKT who will send on further information when it becomes available.

1972 Third international Bat Conference. Sept 5 - 10th

National Park, Plitvitice, Yugoslavia

Cost: registration \$us 20

hotel (single rooms) up to \$11

(double rooms) " " \$17

Address: Imz. Nikola Tvrkovic, Croatian Soc for Natural Sciences, Ilica 16/III, PO Box 258, Yugoslavia.

1972 First Reunion International Speleology Sportive. Sept 15-18

Address: M Fernand Varoquier, 120 rue de Mayeur, B-6071, Chatelet, Belgium.

UBSS Proceedings 1972

The production of Vol 13 No 1 is well advanced, and will contain a wide variety of articles covering archaeology, hydrology, geology and caves. Printing costs have more than doubled since the last price increase for Proceedings, and the Price for the 1972 issue will be increased to £1.50 (from £1.00). Subscribing UBSS members will for a while continue to receive their copy without further charge.

UBSS Field HQ alias "The Hut"

Will past members of the UBSS please note that as student members rarely use this "facility", they are always more than welcome to stay there at weekends, etc. The only exception is for the month of October, when training of new members is under way.