





CLUB NEWS

The Club year has now closed, and with the forthcoming Annual General Meeting and Dinner we look forward to moving into the "Seventies". So much will depend upon how we build from the foundations that have been made over the past few years. A great deal of time, effort and money has been spent to provide members with facilities to develop their caving interests. It is up to everyone to make the most of these facilities to justify us having made such efforts. The Hon. Secretary's 1968-69 Report is published at the end of this issue, and, as requested at the last A.G.M., the Hon. Treasurer has presented his report for the year. Both will be discussed at the Annual General Meeting on Saturday 18th October at Priddy Village Hall, starting 3.0.p.m. prompt. Agendas for the meeting are enclosed with this Journal; and we hope that everyone who possibly can will attend, for if you are dissatisfied with the way the Club is run this is your chance to do something positive, about it.

The Wessex Dinner after the A.G.M. at the Caveman Restaurant, Cheddar, should prove once again to be the social high spot of the year. For those who do not already know, it tends to be informal. We try, even if we don't always succeed, to keep our speakers brief and sober. Members are reminded that they and their guests should have tickets for the Dinner which are obtainable from Miss Jenny Murrell (address on front cover). Since we usually have to make arrangements to seat about 150 it is most important that you place any ticket order early so that we do not have the embarrassment of trying to make room for late-comers. Please be there at 7.30.p.m. to take your places at 8.0.p.m., and note that we have an extension of the licence. Try to come.

By the time this Journal is distributed the Club Jumble Sale, which heads the following programme of events, will be upon us. This sale has been widely publicised in previous issues, and in the Bristol area in particular. If you have not made arrangements to go along to help, or indeed to buy, it is most certain that your assistance will be greatly appreciated by Tony Philpott who is running the sale on behalf of the Club. Other rendezvous in the Bristol area are the Library Nights with Christopher Hawkes at 10 Christchurch Road, Clifton, Bristol 8. All are welcome to attend, for it depends entirely on your response and ideas as to how these evenings might be developed throughout the coming winter. Why not arrange your future caving activities at these gatherings? Normally Library Nights will be held on the first Tuesday in every month as last year.

Dr. G.T. Crummock is attempting to organize a comprehensive survey or register of all the work being undertaken on Mendip in connection with caving and allied activities. The emphasis is on work in progress so that the survey might be a useful way of putting people in touch with each other. As Dr. Crummock is away from the area at present you are invited to forward information c/o Steve Trudgill and Frank Courtney, Dept. of Geography, The University, Bristol BS8 1SS.

We welcome the following new members elected 17-8-69:-

A.J. Burton-Spencer, c/o Upper Pitts, Eastwater Lane, Priddy, Wells.  
P.P. Candlin, 14 Brookfield Way, Olent, Solihull, Warwickshire.  
Miss Margaret Holland, c/o Upper Pitts, Eastwater Lane, Priddy, Wells.  
M.N. Hunt, 62 Gloucester Road North, Filton, Bristol BS12 7PH.  
Miss Sally Murrell, Gelli-Bêr, Castleton, Cardiff.  
J.P. Wileman, 38 Odensk Gardens, Solihull, Warwickshire.  
T. Wilkinson, Exped. Training Centre, H.M.S. Daedalus, Lee-on-Solent, PO13 9NY.

#### CLUB MEETS

<u>Saturday 11th October</u>	1415 hrs.	<u>Jumble Sale</u> . Bishopston, Bristol. Organiser: Tony Philpott, 3 Kings Drive, Bishopston, Bristol 7.
<u>Saturday 18th October</u>	1500 hrs,	<u>Annual General Meeting</u> .
	1930 hrs.	<u>Annual Dinner, Caveman Restaurant</u> .
<u>Saturday 8th November</u>	1100 hrs	<u>Swildons, Shatter Passage*</u> Leader: A.E. Dingle, 32 Lillian Rd., Barnes, London, SW 13.
<u>Weekend 22nd/23rd November</u>		<u>South Wales (Agen Allwed, etc)*</u> Leader: P. Davies, Morley, Silver St. Nailsea, Bristol.
<u>Saturday 10th February 1970</u>	1100hrs.	<u>Swildons, Round Trip*</u> Leader: I. Jepson, 7 Shelley Road, Beecham Cliff, Bath, Somerset.

\* Denotes that wet suits and Nife cells are preferred. Please give the Leader or Organiser prior notice in writing if you intend to attend any of the meets above, otherwise they will be cancelled. Details of additional meets will be made known at the A.G.M. and posted at Upper Pitts.

It is hoped to hold an evening sometime during the coming winter at which members may show their colour slides. Please get in touch with Jenny Murrell giving her details of how many slides, and their subject matter, you would be able to show. Good caving slides are preferred.

#### Proposed trips:-

End of year	1969	<u>Portland Caves</u> . Leader: M.W. Dewdney-York, Oddset, Alfred Place, Cotham, Bristol 2.
Easter Weekend	1970	<u>Yorkshire</u> . Organiser: Alan Surrall, c/o Miss Jenny Murrell, 1 Clifton Hill, Bristol BS8 1BN.

The above leaders would very much like to know how many members are interested in attending the meets proposed. Do write to those concerned as soon as possible. With regard to the Yorkshire trip over Easter 1970, Alan Surrall would like all interested to send him their ideas of what caves they would want to visit and whether they would require a camping site or hotel accommodation.

UNIVERSITY OF BRISTOL DEPARTMENT OF  
EXTRA MURAL STUDIES

Members may be interested in the following courses and conferences available at Bristol University this winter. Full details, including fees and enrolment are published by the Dept. of Extra Mural Studies, 20a Berkeley Square, Bristol BS8 1HR.

- Geology: R. Bradshaw, M.Sc., and J.W. Cowie, B.Sc., Ph.D. Thirty meetings on Tuesdays, 7.0.p.m. - 9.0.p.m. This is the third year of this course, although new members may join. Special reference will be made to the West of England, e.g. Geology of the Severn Estuary and Water supply and the Bristol District.
- Fluvial Geomorphology: D. Ingle Smith, M.Sc., M.J. Kirkby, B.A., Ph.D., and M.D. Newson, B.Sc. A conference of four lectures on Saturday 15th November 1969. 10.30. a.m., with a field day on 16th November to the Chew Stoke catchment area. An introduction to recent developments and techniques in the study of rivers, rates of erosion, and so on.

The following may be of interest to residents in the Mendip area.

- Geology of Mendip: F.S. Wallis, D.Sc., Ph.D.  
A course of ten meetings on Tuesdays, 7.15.p.m. - 8.45.p.m. commencing 7th October 1969 at The Town Hall, Axbridge.
- The Wedmore Area; A.B. Hawkins, B.Sc.  
A course of ten meetings on Tuesdays from 7.30.p.m. – 9.0.p.m. commencing 7th October at the County Primary School, Wedmore. The geological history of the area will be discussed, including the adjacent Mendip Hills, and particular attention will be paid to the changes in sea level during Pleistocene and Recent times.

G.B. Cavern: Important Notice

The following information has been received from the University of Bristol Speleological Society:-

"Please note that there has been a boulder collapse in the New Series, and some boulders are now unstable. The corkscrew on the easy way up to Great Chamber has been destroyed, and this route is no longer possible. No-one has yet been up to Great Chamber since the collapse".

In view of the above members are advised that the Ladder Dig Series is dangerous, and parties should get up-to-date information before planning trips to this part of the cave.

## FIELD TEST REPORT: Suunto Compass and Inclinometer

by T.M.L. Wigley

### Introduction:

Two Suunto Instruments, Compass KB-14/360 R T and Inclinometer PM-5/360 PC T, were purchased for surface and sub-surface surveying associated with a study of the hydrology and morphology of a gypsum karst area near Canal Flats, British Columbia, Canada. This study is being supported by NRC Grant No. A5141.

The instruments are compact (each measures 7.4cm x 5.3cm x 1.5cm), lightweight, rugged, accurate and easy to use under normal conditions. They were chosen in preference to the more commonly used Brunton Compass and Inclinometer because they appear to be superior to that instrument in a number of ways. They have the advantage of a self-contained Tritium light source which makes possible their use in total darkness.

A cursory examination reveals the Suunto instruments to be at least the equal of the Brunton for surveying in daylight on fairly level ground. Since the instruments have their own light source and since they appear much more robust than the Brunton, one would expect them to out-perform that instrument under more testing field conditions. In an attempt to verify this expectation, both Brunton and Suuntos were used to survey a difficult cave in Pocohontas County, West Virginia. The results are presented in this report.

### Results:

1. For steeply dipping sights the Suunto Inclinometer is, indeed, easy to use. However, this is not so for the Suunto Compass, particularly when sighting on points below the observer. When sighting upwards it is necessary to extend the cross-hair mentally up to intersect the sighting point. For elevations up to 20° this is relatively easy, but there must be some loss of accuracy even up to this elevation and a greater loss as elevation increases. The same technique applies to sighting to below the observer, but the construction of the instrument makes this a more difficult, and hence less accurate, process. The necessity for downward sights can, of course, be eliminated by back-sighting when the circumstance arises.

2. Overall ease of reading. It was anticipated that, in the dark, the Tritium light sources of the Suuntos, obviating the need for an (often metallic) external light- source, would make them both easier to read and more accurate than the Brunton. In daylight the Suuntos can be read quickly and easily to the nearest ½ degree and are marginally better than the Brunton. However, inside the cave (where the air temperature was about 50°F, some 20°F cooler than outside, and the relative humidity was 100%) the eyepieces of both Suunto Instruments fogged up after a few minutes. In this condition they were almost impossible to read. Since the 'fog' was a

Footnote: Prof. Tom Wigley is on the staff of the Dept. of Mechanical Engineering, University of Waterloo, Ontario, Canada. He is a member of the Cave Exploration Group of South Australia, and is currently visiting this country.

condensate of small droplets on the interior of the eyepiece, illuminating the dial did not make it possible to read the instruments nor could the fog be removed by cleaning the eyepiece.

The fogging was an unexpected occurrence. The instruments are reputed to be used in very cold conditions apparently without fogging. This would indicate either that the interior of the eyepiece is sealed and evacuated (or filled with dry air or nitrogen) or that the eyepiece is not sealed. With the latter possibility rapid cooling of the instrument could result in semi-permanent fogging inside the eyepiece. This condition could be removed by gentle warming (with the flame of a carbide lamp, perhaps). Since the cave was very wet, being a series of waterfalls linked by short horizontal sections, we were using only electric helmet lamps and so could not test the possibility that warming would remove the fog. On inspection some hours after leaving the cave the fogging was no longer present.

3. Waterproofing and robustness. Prior to the field test the Suunto Instruments were completely immersed in water for a few minutes with no ill effects. After a short period in the cave, during which time the instruments were never completely immersed in water, but were frequently, though only momentarily, in contact with water, it was noticed that water had apparently entered the dial portion of one of the instruments (the compass). The cause of this became apparent later. The dial housing appears to be completely sealed, but is overlain by a thin plastic sheet which can leak water around its edge and close to the centre spindle. This produces a thin film of water between the housing and the plastic. The same effect can be obtained by immersing either instrument in water and pressing repeatedly on the face of the instrument. The water slowly evaporates and disappears after a few hours or days.

### Conclusions:

On this test the Brunton performed much better than the Suunto instruments; only six survey 'legs' could be completed with the Suuntos before they could no longer be used due to fogging, while there were no difficulties encountered with the Brunton.

The water leak (3 above), though annoying, should not affect the performance of the Suunto instruments. Further testing is needed to determine whether or not the instruments are truly waterproof; the fact that water can enter a part of the instrument may be an indication of a more serious defect. The Suunto instruments seem to be at least as robust (resistant to bumping, knocking, dropping etc.) as a Brunton and could well be better. Their construction certainly appears to be more robust. Further testing of robustness and resistance to leaking, though obviously desirable, was impossible without risk of permanent damage.

In summary the Suunto instruments are judged superior to the Brunton for surface surveying under the great majority of conditions. For subsurface work especially when water is present, they cannot be recommended unless the eyepiece fogging either was a peculiarity of the particular two instruments used in this test or can be removed quickly and simply when it does occur.

In many surveying situations steeply dipping sights can be avoided or replaced by combinations of less steep and exactly vertical sights. However, when large inclinations cannot be avoided the

Suunto compass must be judged inferior to the Brunton. (This defect is reduced to some degree because the absolute error due to bearing inaccuracies decreases as inclination increases).

This is a preliminary report only. It should be noted that only two instruments have been tested and that further field testing is continuing. The results quoted here may not apply to all Suunto instruments. The field test described was under severe conditions which are only infrequently encountered, and even the instruments used in this test may be suitable for subsurface surveying under less exacting circumstances. A more complete and objective evaluation should be made under laboratory simulated field conditions using a number of instruments.

## ANTI-SCALLOPS AND THEIR ASSOCIATED HARKYEOLGY

by Mr. Ino. D. All.

During a recent trip to Reservoir Hole with Willie we were nearing the bottom of the dig when he pointed to a hole in the roof and made the calculating remark ..... "That's a chiliahedronic scallop and it proves that the water flowed upwards!"

I ask you.....do all geologists think that we serfs are lacking? Surely it is common sense that water cannot forever flow upwards. I think that the time has come to expose all this nonsense and to give you a true insight into life's wonderful mysteries.

We must hypothesize that for everything there is an 'anti' and what Willie really saw was an Anti-scallop (*Nec scire fas est omnia*). For example how many of you have actually seen water flow upwards? You can discount syphons, for these and other relevant phenomena have been fully explained by 'Tomorrows World', 'Tom-Tom' et al. Also, everyone knows that what goes in one end of a hosepipe doesn't necessarily come out of the other.

The main part of my tale begins way back in the Cretaceous. No one knows, except me, why at the end of that period all the large reptiles disappeared quite suddenly in fact. What actually happened was a result of two factors: first, there had been for a long time too much land in the Northern hemisphere, and the world was becoming top heavy. Wegener foresaw the danger but he couldn't get around to the problem in time; secondly, the reptiles became larger and larger and the whole mass became unstable.

Thus began the most significant period in Earth's history. The Earth perturbed (or rolled over) on an axis whose poles were at Padang in Sumatra and Pinchincha Province in Ecuador. These uneven perturbations, which occurred every time that there was a 'p' in the month, led to the reptiles being flung off the face of the Earth (it is of course possible that they saured off), and they departed in a phugoid curve.

This Perturbatory Period was the cause of the subsequent Alpine folding. It led to the formation of the Pennines, the Pyrenees, thea Ppalachians, thea Ppennines, the hills around Padstow and the various Piedmonts (some outstanding examples of Italian uplift can be seen at your local

cinema). We know that there was little folding in the Eocene, Oligocene or Miocene but common sense tells us that it must have been at a peak during the Pliocene and Pleistocene. Fortunately the arrival of the Holocene put an end to all this roly-poly nonsense, but the effects are long lasting and have left a permanent perturbatory paranoia in our pituitary parts.

Let us examine some of these trends. Have you ever seen maps of the Moon or Mars? They are shown with North at the bottom, South at the top, West in the East and East in the West. Have you ever seen Patrick Moore talk about the Moon? "Andherewe see the Sea of Tranquillity with North sorry South at the top" (with apologies). You see even he isn't sure which way is up and which is down. Consider moving towards the North(South?) pole with a compass when you get near your goal the wretched needle swings towards the South(North?) pole. More definite proof is the fact that it declines towards the true pole the nearer you get to the false one.

And now to Mendip. During the last perturbation when the N/S Pole became the S/N Pole the world was upside down (or up) and the water must have come rushing out of the caves. Here is the origin of anti-scallops; this water must have formed the Gorge as it rushed downwards and it must have left deposits of heavy material on the bottom of the Mendips. This is why you always find valuable mineral deposits in hilly areas, for example Priddy lead. The best known of these heavy deposits is called Priddy Nine Mascons and it is obvious that the human remains found in them are those of Homo ponderous (some authorities quote Homo gravis). Imagine these poor unfortunate people being swept out of Wookey Hole and being forced against their will to perambulate perturbatorily down the slope to Priddy.

Every time you see an unusual stalactite in a cave you are really looking at a perturbatorite (helictite is a degenerate word). Cave Pearls are bits of loose stal. that have been smoothed off by bouncing from floor to ceiling and back during the perturbations.

There are many other instances that I could use to convince you but one more will suffice. We have all been influenced at some time in our lives by the N.S.P.C.C., and as its value is 0.5 it must be right.

Note: N.S.P.C.C. North South Polar Correlation Coefficient.

Acknowledgments: To Will Edwards for sound advice on North/South Polar Harmonics.

Recommendations: It may happen again so buy Pritax.

## LETTERS TO THE EDITOR

"Pinkacre",  
Leigh-on-Mendip,  
Bath.

30th August, 1969

Dear Sir,

The article by Brian Hansford in the June Journal, No. 123, page 312, on Chipongwe Cave, Zambia, was interesting from a medical, as well as speleological, point of view. He concludes by recounting how Bob Nash was admitted to hospital with a disease called Caves Disease, ".....about which little appears to be known".

In fact quite a lot is known about this disease. It is called "cave sickness", or Benign pulmonary histoplasmosis, and the literature was well reviewed, quoting twenty two references, by John Aspin and Eugenio de Bellard-Pietn, in the Transactions of the Cave Research Group, Vol. 5, No. 2. (December 1959) page 107.

The disease is due to a fungus, Histoplasma Capsulatum which grows saprophytically in the soil in the warmer parts of the United States, as well as Venezuela, South Africa, Peru, Rhodesia and Tanzania. It is, in fact, so common, that in parts of the Mississippi Basin skin tests demonstrated that 80% of the inhabitants had previously had contact with the fungus. Before this histoplasmosis was thought to be a rare and universally fatal disease, based on the descriptions of the few cases in which it became generalised.

Most of the cases described occurred in people in contact with infected dust, from hen houses, pigeon lofts, caves and so on, who developed an acute chest infection about twelve days after infection. X-ray changes are, as Brian Hansford says, indistinguishable from primary tuberculosis. Usually the disease follows a benign course and recovery takes place in a few weeks or months, but deaths have occurred. Dean (Central African Journal of Medicine, 1957) noted the fact that Lord Caernavon died of pneumonia six weeks after opening the tomb of Tutankhamen, and several of his helpers died from the same disease.

The disease does not occur in Britain, or in any place where most of us are likely to do any caving. However, it would be interesting to hear of any chest infections arising in people caving in Jamaica or North Africa.

Yours etc.

D.M.M. Thomson.

In a letter to the Editor dated 3-9-69 Oliver Lloyd writes:

"Regarding Hansford, Vol.10, No. 123, p. 312, last para. 'Cave Sickness' was written up by me in the Wessex Journal, Vol. 3, No. 52, p. 24.....".

S,S. Hotair,  
Stantkindrew Lines,  
Bristol Channel.

August 23rd, 1969

Dear Sir,

We write to you as a friend of spore. We have a tale to tell which even your man Ino. D. All could not imagine. We know that the great white fathers of your universities do not find so many of us at their 'resurgences' as they put in. This is not because we are fornicating by the million at the great lycopodium interface! We spores do not do this sort of thing, in fact we cannot as they whip off our exines by boiling us in Bristol. They then dye us so that their corrupt and illiterate 'Karst Police B Specials' can recognise us lest we try to escape the underground ghettos.

However, thanks to the freedom organisation Liberspore we are led along the strike (their term) right round the back of Mendip and out to sea near the free island of Steepholm. This system was working well until last week when one of their vehicles, on which we are now held captive, called to 'sample' us. However, I hope you will bring to the attention of your readers the courage of the spore - those who are captured in the K.P. nuts (or nets) change their colour by concentrated thought. Verification of this feat may be sought in the findings of these monsters in the Burrington area.

Yours sarkarstically,

Two Spores.

## MENDIP NOTES

by Schizomycetes

### Eastwater Reopened.

Tony Jarrett and members of the Axbridge Caving Club opened a route to the right of the collapsed entrance and found the old guide wire through the ruckle intact. Except for signs of recent collapses at the lower end of the Boulder Ruckle, the way through the Traverse is open. Various parties have been down the cave since it was reopened at the end of July, and report that the new route is decidedly unstable and that great care is required.

As Mr. and Mrs. Gibbons indicated to a general meeting of cavers, after the collapse of the cave in 1967, they have increased the fee for going down to 2/- a head. Also, they insist that all parties visit them to get leave for their trips. We hope that all cavers will respect their wishes.

### Gargill Pot ("nee" Twin Titty Dig).

Over the last three weekends in August a great drive was made to sink a shaft in the solid limestone adjacent the collapsed Twin T's dig. This is the first time that fully mechanised tactics have been used for such a dig on Mendip. Luke Devenish provided the knowhow, rock drills and bang; compressors were hired locally, and members of the North Hill consortium provided most of the manpower.

On the first weekend Luke brought in his drilling rig and sunk seven 1½ inch holes, one 29 feet deep and the others 22 feet, to mark the edges of the shaft. An eighth hole should have been drilled but was abandoned since it encountered clay which jammed the bit badly. These deep holes were to form the so-called trimmers of a 4' 6" square shaft.

The second weekend saw the business of excavating the shaft start in earnest. Hand held compressed air rock drills were used to bore 4 foot inclined shot holes inside the trimmers; these are called easers. Delay detonators fired the shots placed in the easers and trimmers in that order. After the laborious business of clearing away all the spoil was completed a further "ring" of 4 foot easers was drilled, and the whole sequence repeated. By the end of the third weekend, the August Bank Holiday, an impressive 20 foot shaft was completed.

It all sounds easy, but in fact we met several problems and everyone learnt a lot. This will not be the last time such methods are employed on Mendip. We look forward to reading a fuller illustrated account of this historic effort in a later issue of the Journal so that future would-be exponents of the "art" may know how to get about the job. Finally, let's hope it was all worthwhile!

### When will they ever learn?

Recently a fixed chain appeared at the short climb at the foot of the old "Forty" in Swildons Hole. It was quickly "removed". Enough said

### Downhead, Eastern Mendip.

Members of the Portsmouth College of Advanced Technology Caving Club have recently been active at Dairyhouse and Bottlehead slockers. They report their hopes of finding a system which connects the caves in the Downhead area.

Earlier in the year Cerberus members added over 100 feet to Dairyhouse, and were optimistic about more extensions in the dig.

### Shatter Cave, Fairy Cave Quarry.

How wrong first impressions can be! It has now been found that the system actually heads south, and not east as shown on the Grade 1 sketch plan published in the August W.C.C. Journal. A preliminary Grade 6 line to the end of the cave completed recently shows the terminal choke to lie on a bearing of 188.5°, 678 feet from the entrance. The confusion seems to have occurred between Tor Chamber and Pisa Passage.

At the time of writing it is understood that a new streamway is being explored leading off from the entrance to Erratic Passage. We hope the definitive survey and report will be published in a later Journal.

### Westbury-sub-Mendip Quarries.

Apart from attracting our attention as one of Mendip's worst eyesores, the quarry by Westbury Lippiat has now got into the news for the discovery of significant Pleistocene remains. Christopher Hawkes has been examining the finds on behalf of Bristol Museum, and we understand that Tony Oldham has been there too. Rumour has it that a deep rift has been opened up, and that its caving prospects appear reasonably promising.

The quarry lies about 100 yards to the south of the well known Brimble Pit sites, which many believe to have potential as leading to deep caves. Why must it always be quarries that discover these things? One imagines that the finds are doomed to the usual fate that befalls sites found by quarries.

### Rhino Rift.

John Cornwell and members of the East Somerset Caving Club have installed an impressive railway at their Rhino Rift dig. Clearly, they anticipate a long "siege" throughout the winter.

### Dr. Stanton we presume.

During July Jim Hanwell, Len Kent and Donald Thomson had an away fixture with Willie Stanton in the Alentejo, Southern Portugal. It's hot there, and there aren't any caves! Your scribe understands that Jim was leading a Royal Geographical Society sponsored expedition to study Willie's home town of Grandola. Actually, he won't acknowledge it as his "home", but stares wistfully past a nearby water tower in the direction of Reservoir Hole, saying unrepeatable things about Will Edwards.

On the way home Jim spent a few days with Fred Davies and Dave Causer in the Picos de Europa, Northern Spain. They were camped in the isolated Caceres Valley between the formidable Central and Western Massifs of "The Picos". Apart from bagging the odd 8,500 foot peak, and some exhilarating mountain walking, they have located a big swallet about 7000 feet above sea level which appears to have great prospects. Fred and Dave went on to survey a cave near Ramales in Santander Province.

## SOTANO DEL SAN AGUSTIN; 'deepest cave in the Americas'

By Gary Pilkington and Tich Morris

The Sotano<sup>1</sup> del San Agustin, lies in the Oaxaca district of Mexico, some 200 miles south-east of Mexico City, near the mountain municipality of Huautla de Jiminez.

The Christmas period is the only time that underground exploration is practical in the Huautla area, as the Mexican 'dry season' occurs at the same time as the winter season in Britain, while during the rest of the year Huautla is enveloped in an almost continuous downpour of rain.

Some years ago, the Association for Mexican Cave Studies (A.M.C.S.) emerged as the driving force behind cave exploration in Mexico, successfully completing many noteworthy descents, the most spectacular being the Golandrinas Pit, a free-hanging rope descent of 1100 feet.

Christmas 1967 saw a large expedition in the Huautla area, comprising of A.M.C.S. members and a contingent from M.U.C.C.C.<sup>2</sup>. The McMaster team reached a depth of 1750 feet in the Rio Iglesia Cave, incidentally furthering the America's depth record by several hundred feet. The A.M.C.S. members (mainly Texas cavers) descended the nearby Sotano del San Agustin, reaching a point 1400 feet below the surface, further exploration was brought to a halt by a waterfall of alarming proportions. John Fish (Texas) and Cliff Foreman (New York) made a desperate attempt to bottom what seemed to be a very deep shaft, but failed through lack of support and the volume of water thundering down the shaft. This brought an end to 1967 cave exploration in the area.

With a potential depth of 4000 feet the Sotano del San Agustin became the focal point of conversation on the American caving scene. 1968 saw the planning of another major Christmas expedition to Huautla, with San Agustin as the main aim.

After three months of planning and preparations the McMaster team of 12 men left Canada in two hired trucks. The first snag on the 3,000 mile journey was encountered at Austin, Texas, where the lead vehicle arrived to find that most of the American co-explorers there had been stricken with 'Mao-flu'. The remnants of the team staggered to their feet however, and three days later some twenty cavers were installed at Huautla.

The climb up into the dense green jungle of the Huautla Plateau from the Oaxaca Desert was along a switchback dirt road that clung to a precipitous escarpment. Some anxiety was expressed as the sunshine turned into mist and rain, the dripping jungle adding a sombre effect to the scene (the success of the expedition hung on dry weather and consequent low water conditions underground).

The reception that we received from the local people in Huautla was as depressing as the weather conditions. Eventually, John Fish managed to procure a building in the nearby village

### Footnotes;

1. Sotano: Spanish for deep chasm.
2. McMaster University Caving and Climbing Club, of Ontario, Canada.

of San Andres (adjacent to the San Agustin Doline) whilst other members of the expedition engaged the local Mayor in a goodwill parley. The verbal consent of the Mayor is required before outsiders are allowed in the area to stay. The cold attitude of many of the Huautla area Indians is to a large extent justified, as in the recent past much friction has been caused by large bands of 'hippies' descending on the area in search of 'Magic Mushrooms', a variety of wild mushroom with halucinogenic content (similar to LSD.) which is to be found only in the vicinity of Huautla. The 'hippie' utopian era came to an abrupt end when a Mushroom party culminated in a wild naked run through the streets of the village; the Mexican Authorities deported the erring mob and placed a strict ban on hippies in the area. Not surprisingly the Indian inhabitants of the Huautla Plateau find it difficult to distinguish between 'spelunkers' and hippies.

The following day, noon 'dawned' to find the expedition personnel confronted by a 700 lb. mass of food, equipment and rope. The basic plan of attack called for two teams (A and B). Team A was to take the initial brunt of the work below Camp 1. pushing down to a depth of approx 2000 feet and then establishing Camp 2. Team B was to descend to Camp 2, spend a night there, and then push on to the limit of their endurance and it was hoped to the bottom of the cave. It would be the duty of both A and B Teams to rig the pot and convey all the gear down to Camp 1. Fortunately, by this time the weather had cleared up, the area was bathed in bright sunshine, and we were glad to see water in the surface streams was low. Originally it was planned to start the exploration on the second day in camp but as several people felt fit and eager to be on with the task a small party prepared to descend and move gear down through the entrance section. The entire camp assisted in the transporting of the gear down the side of the Agustin Dolina (which is 500 feet deep, 2 miles long and half a mile across the top), leaving the volunteers to move the gear into the cave.

The entrance to San Agustin is through an insignificant cave tunnel at the bottom of the Dolina. The tunnel is only a few yards long and in a matter of seconds one is on a balcony 20 feet down from the top of the shaft. From here the shaft plunges 450 feet deep and is 150 to 200 feet across. Its upper lip is a mass of vegetation, with enormous vines and creepers drooling downwards into the depths. The entrance pitch drops 300 feet from the balcony, descending through a chaotic tangle of greenery. The first man down is obliged to hack a path through this jungle with a machete, a hazardous task, chopping with a 2 foot blade whilst descending a single rope. From the bottom of the first pitch the cave descends a steep gully for 150 feet which brings the entrance shaft into the Big Room (room is U.S. term for chamber) 800 feet long, 200 feet wide and about 200 feet high, winding down to the head of the 3rd pitch. This was the stage reached at the end of the first day, a fair number of man hours having been spent hauling the tackle to this point since both the 1st and 2nd pitches presented some technical difficulty for the manipulation of tackle.

The main assault on the cave started the following day. All the equipment had to be ferried down through the 1st rift section to the 850 foot level and the 1st camp established. The rift section below the 3rd pitch consists of a series of very wet pitches, not unlike the Battle-axe and Thunderstorm Depot section of Lost John's System in Yorkshire; fortunately, none of

them exceed a 70 foot free fall, and thus present a problem in tackle handling rather than physical effort. The bottom of the rift developed into a gloomy hands and knees crawl along a canal, looking at every turn like a potential sump. However the dripping band of explorers eventually found themselves at the proposed sight for Camp 1. A more inhospitable place could hardly be imagined, with water roaring and spraying in every direction and not a half decent spot to kip anywhere in sight. Alas, this was it. Beyond, the cave plunged down a 1000 foot rift with no hope of a possible camping site. At this stage Team B had to return to the surface, cheered by the thoughts of emerging into the tropics. They waved farewells to the unfortunate party faced with the task of setting up camp and finding some little rat hole to 'sleep' in. Before turning in a group spent some time rigging the initial portion of the second rift ready for the next day's assault.

After the first night underground, A Team wearily slid from damp sleeping bags and ate a substantial breakfast. From here on down all the pitches were to be rigged solely with ropes, (using the abseil-prussic technique for descent and ascent) whereas up until this point the pitches had been rigged with ropes and ladders in the conventional 'British Style'. It was felt that this rope rigging would help make the "carry lighter", In the deeper part of the cave, in fact, we intended to abandon a good deal of the rope, cheap hemp rope having been bought for this reason.

The descent through the next section of the cave, aptly titled the 'Fissure' has been likened to a nightmare. Imagine a 1000 foot deep cleft in the mountain, with a deluge of water crashing from ledge to ledge. Unfortunately, human progress can only be made by following the water for the main part of the descent through the Fissure. This section is the crux of the whole cave; it was here that all the previous American attempts had ended. Most of the pitches in the upper section of the Fissure are like the 'Niagara Pitch' in Pen-y-Ghent Pot, only longer. The lower section sports a G.G. Main Shaft (wet), followed for good measure by a pitch not unlike the last one in Juniper Gulf.

The antics in the upper section of the Fissure would have tested Tarzan's ability to the full, with ropes rigged at all manner of crazy angles. Long traverses led from one water shoot to another and sometimes the only way to reach the top of one pitch from the bottom of the last was to swing in a long pendulum motion until in a position to grasp frantically at the belay point of the lower pitch. (T.M. at one stage found himself attached to two separate pitches at the same time, suspended hammock fashion by his feet and chest, the elasticity of the ropes acting rather like a mediaeval rack).

The 300 foot pitch in the lower section of the Fissure seems interminable, and at the bottom of the pitch is a deep pool which inevitably engulfs the unfortunate rappeller before he can reach safety on the side. The bottom of the 300 footer is the point reached in the previous attempts. J.F. was to have first crack at the next pitch (J.F. was the strength behind all the attempts to overcome this shaft). On this occasion the water was exceptionally low and he had no problem in getting to the bottom after a descent of 175 feet. The landing was on a huge ledge. The next drop proved to be a 60 foot one, finishing in an impressive horizontal

stream passage. The Team eventually mustered at this point, and set off with the remaining piece of equipment, a 400 foot length of rope. After a short distance the passage opened into a large dry tunnel, Aggy-type. Here Team A intended to establish a second camp. The stream had disappeared at the start of the dry passage through boulders in the floor, but as enthusiasm was at a high point it was decided to push on and try to locate the stream passage further down the cave before setting up camp. Everyone pushed on, and eventually emerged into a superb streamway, angling steeply into the heart of the limestone. The streamway fell away in a succession of small pitches; a 20' followed by another 20'. Both had to be rigged, and then followed a 10 footer, mercifully climbable. A canal led on from this point to some gravel banks and a sump. M.B. free-dived this sump into an air pocket which proved to be the end of the negotiable section of cave. This untimely end eliminated the need to set up a second camp, so Team A returned to camp 1.

The following day B Team came into the pot and, reinforced by some of the more enthusiastic members of Team A descended to the final sump to survey back to the head of the 300 footer in the Fissure. Although the overall time for the B Team survey trip was only 28 hours from daylight to daylight, most of Team A were underground for a total of 5 days.

### Summary

The main problems occurred on the ascent of the entrance shaft. The shaft was rigged with a ladder and a self-lifeline device (single Jumar). The first incident took place when G.P. and J. Fitz., commenced the 300 foot ascent together; when they were about halfway up the ladder broke in two places (presumably weakened previously by falling rocks). Neither of the two was injured and both were eventually able to continue the ascent. The second incident on the entrance shaft occurred when a large falling rock struck J.F. on the head knocking him unconscious for a short time, but fortunately he was not badly hurt and climbed out unaided. Probably the most serious incident of the trip was the severing of a rope (by unknown persons) whilst J.F.'s wife was ascending a nearby 100 foot shaft. She was 70 feet from the bottom when the rope was cut, but fortuitously she was only 6 feet above a ledge to which she managed to cling. Although badly shaken, she received no injury.

Many things were stolen from the expedition during our stay, and a number of violent acts of vandalism were committed against us by the local people. There is not much that can be done to prevent such vandalism, except to play it cool and hope that relationships between the Indians and outsiders improves with time.

Because it has a potential depth of 4000 feet it was originally anticipated that the exploration of San Agustin would take much longer than 5 days. The fact that we only reached a depth of 2006 feet was something of a disappointment to many of us. During the rest of our stay several other holes were explored to various depths. The Agua Carlarta was explored to a depth of 600 feet at which point it was still going strong (with a potential depth of 2000 plus feet), and Las Quevas del San Agustin was explored to a depth of 800 feet (it also has a depth potential of 2000 plus feet). One other unnamed cave was bottomed at a depth of 600

feet by a small party. In the light of new information it seems unlikely that anything in the immediate vicinity of the San Agustin Dolina will go deeper than 2500 feet, although the plateau 2000 feet above the Huautla area should yield something really big. Air photos reveal many huge and promising "craters", and it is now just a matter of finding out how accessible the plateau really is for it could be impenetrable jungle, before another expedition is launched into the Oaxaca Province. If the plateau does prove impractical, then attention will be focused on either Agua Carlarta or the Cuevas del San Agustin. If the plateau does prove practicable, then add 2000 feet on to the top of San Agustin and you have one hell of a hole!

Personnel

Team A

Bill Biggers, Washington D.C.  
 (M.B.) Mike Boon, M.U.C.C.C.  
 Ian Drummond, M.U.C.C.C.  
 (J.F.) John Fish, Austin, Texas.  
 (J. Fitz.) John Fitzgibbon, M.U.C.C.C.  
 Kirk McGregor, Toronto.  
 (G.P.) Gary Pilkington, Wessex C.C., Bradford P.C.  
 Dr. Tom Wigley, South Australia Cave Group.  
 Ron ---- -----? Georgia.

Team B

Julian Coward, M.U.C.C.,C., London U.C.  
 (T.M.) Tich Morris, M.U.C.C.C., Chelsea.  
 Richard Schrieber, Georgia.  
 Pete Thomson, M.U.C.C.C., Hull P.C.  
 Mike ----- ? Georgia.

Assisted by :

John Drake, M.U.C.C.C., Oxford U.C.C.  
 Bill Skinner, M.U.C.C.C.

Table of pitches (in feet):

Entrance	1st Rift	The	Fissure	Sump Passage
290	40	70	10	20
154	40	30	300	20
	30	40	160	10
	110	60	60	
	75	20		
	30	50		
	Camp 1.	50		

## BOOK REVIEWS

Mountain Rescue and Cave Rescue. Issued by the Mountain Rescue Committee 1968 - 1969. 68 pages, 4 maps, 3 diagrams.

Price: 2/6d. (plus postage)

Available from: H.K. Hartley, Hon. Sec. M.R.C., 9 Milldale Avenue, Temple Meads, Buxton.

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The title of this booklet promises the caving reader great things. True, by the time he reaches the final page he will be pretty well acquainted with the principles of Mountain Rescue work, but alas, he'll be only a little wiser on the rescue aspects of caving. Agreed, many of the methods used are common to emergencies in both sports, but nevertheless, the title being what it is, I find it difficult to justify the book's heavy bias towards Mountain Rescue work. Indeed, in the main section, which deals with the practical side of rescues, this bias amounts to an approximate page ratio of 8.1 to the exclusion of caving interests.

The Bibliography mentions eleven books and four periodicals on mountaineering - on the caving side only British Caving and Britain Underground are listed, and even these are denied the short "blurb" that accompanies most of the rest. In the sections on general rescue equipment, personal tackle and stretchers, caving isn't referred to at all. Only the part on First Aid, which has deliberately been kept short and simple, remains unbiased.

On the credit side, however, it must be said that the sections on caving are very clear and concise, though not as detailed as those on mountaineering. The comprehensive list of First Aid Posts and Rescue Organisations, which includes maps and telephone numbers in many areas, is also to be commended.

All in all, this little handbook will prove to be of most interest to the mountaineer, though in the absence of any other booklet of this nature, the caving reader will not find his half-crown to be entirely wasted.

It is a great pity that a publication which aims at educating its readers in the safety and rescue aspects of these two sports should fall short of this worthy objective only because of its unbalanced viewpoint.

H.A.P.

Aspects Sociaux de la Pollution des Eaux Douces. Editions de l'Institut de Sociologie (University of Brussels) 1968.

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Although mainly the province of engineers and scientists engaged in the problems of purifying our diminishing and increasingly polluted water resources, this small 144-page book has some sections relevant to cavers. For example, it contains a short report on the effects of pollution on tourism and sports like caving which exercise increasing demands on fresh water rivers for recreation. New methods of water-board control are advocated, many of which emanate from systems already adopted by River Authorities and Waterworks in this country to some degree, though probably not enough in view of the problems likely to confront us soon. Let us hope that the powers that be will be willing to discuss the measures necessary, and not take uninformed decisions to the detriment of caving.

J.D.H.

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Karstmorphologische Studien in der Glazial-Überformten Höhenstufe der "Picos de Europa", Nordspanien. by Franz-Dieter Miotke. Jb. geogr. Gesell. Hannover Sonderheft. 4 (1968).

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While your reviewer can claim little depth of understanding of this 162-page monograph as it is in German, nevertheless, this publication seems worthy of being drawn to the attention of the growing numbers of British cavers visiting the Picos de Europa, Spain. For a start, the first class photographs of this stupendous region will whet the appetite of many who like their caves served up with 8,000 foot mountains and ample helpings of vertical faces tastefully iced. The caving prospects appear unlimited, granted the necessary permission from the appropriate Spanish authorities. They generally welcome bona fide expeditions anyway.

The five-part monograph is essentially descriptive, predictably assigning most of the landforms to solution processes and subsequent cavern collapse. An account of field experiments on groundwater hardness at different stations is given and the part played by CO<sub>2</sub> (particularly in the soil) emphasised. Undoubtedly this is so, but one is left somewhat unconvinced owing to the restricted nature of the tests both in time and locality. Having been fortunate enough to observe the area at the end of winter as well as in summer one feels that the role of mechanical processes has been underplayed. High up there is abundant surface debris being carried underground by melt water torrents, and flood producing rainstorms are frequent. More attention to the properties of "Picos" limestone would seem necessary to such studies; indeed, this holds for the solution experiments undertaken anyway. Detailed hydrological studies in this wild area would prove formidable - one shudders at the prospect of water tracing let alone the practical difficulties involved even locating the sinks and risings in the first place.

Given time, much could be done here to explain the processes at work in alpine karst regions. But more knowledge of the cave systems which must abound in the Picos is needed first.

J.D.H.

## SHORTER NOTICES

Town with a hole in its life, by Colin Simpson. A Spectrum report published in the Sunday Times, 6th July 1969, p. 9.

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A description of complex chalk mines discovered beneath a suburb of Bury St. Edmonds. The Chelsea Speleological Society were called in to explore and survey the mines for the Town Council.

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The British Caver. Volume 52, August 1969. Published and obtainable from G. Platten, Rotherfield, Fernhill Lane, New Milton, Hants. 1 1/6.

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Over 100 pages of miscellaneous caving news, and items of general interest.

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Geology Explained in the Forest of Dean and the Wye Valley. By William Dreghorn. Published by David and Charles 1968. 40/-.

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Of particular interest to cavers active in "The Forest". There is an illustration or line sketch on nearly all of the 196 pages of this book, although the latter suffer from frequent errors and poor lettering.

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Caving. By James Lovelock. Published by Batsford 1969. 25/-

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The quality and content of this "handbook written with both beginners and experienced cavers in mind", and released in June of this year, does not come up to expectations. To a large extent its impact will be undermined by the Cave Research Group's Manual of Caving Techniques published in September, which is far more comprehensive and worth the extra money.

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Manual of Caving Techniques. Edited by Cecil Cullingford. Published for the Cave Research Group by Routledge and Kegan Paul. 84/-.

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Twenty one well known cavers have contributed to this 416-page manual. Apart from the editor three of the authors are Wessex members. A full review will be published in the December Journal.

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Cerberus Spelaeological Society. Newsletter No. 20. September 1969/

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The list of 63 sites not in Nick Barrington's "Caves of Mendip" is of interest, and one is pleased to note that most have been given an 8-figure National Grid Reference. The literature references given are, however, inconsistent; a number of older more detailed ones have been missed. The article on "Pesticide Pollution of Cave Water" by Pete Rose deserves following up, especially since it is clear that such pollution is of far greater danger than from other sources, including cavers themselves.

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Hon. Secretary's Report to the Wessex Cave Club  
September 1969.

Since the beginning of the Club year the energy of the Wessex has been directed towards the provision of a new Headquarters at Upper Pitts, and during the year we have seen this rise from a boggy field near Eastwater Farm to become a very fine caving headquarters. The Club has used the experience and practical knowledge of its members, who include architects, heating engineers and decorators. Two people have done very much more than their fair share of the work; Phil Davies and Alan Surrall. Phil has supervised work on the site almost every weekend since before the shell was completed, and Alan's Responsibility has been the installation of services, especially the electrics. Without them we could not possibly have got as far as we have. Palatial though it is, the Headquarters is not yet complete. At the time of writing the hot water system is not working and the showers are incomplete. We cannot live there officially until fire precautions have been approved. However, we have an address, which is:-

The Wessex Cave Club,  
Priddy, WELLS, Somerset. BA5 3AX.

and we shall soon have a post box. More concrete is needed for the surround, and we are still short of bunks. We shall probably find, as other clubs have done, that work never really stops at all. The Committee discussed at length whether hut fees should be increased, as one might expect on moving from one star to three star premises, but eventually we decided not to alter the scale, at least until we had had a chance to assess the probable income. We were very anxious not to risk fragmenting the Club, and therefore resolved to sell both the hut at Hillgrove and that at Eastwater and we have now managed to do so. The Eastwater hut went first, for £50, to the Severn Valley Caving Club, and the Hillgrove hut we sold to a good home in the form of a Bristol Scout Troop, who offered £60 and agreed to dismantle it, thus saving us the cost of doing so. The undoubtedly high price we received for the Eastwater hut made the sale of Hillgrove appear hasty and the price too low, but we received few offers for this and had we not sold it the cost and inconvenience of dismantling it would have been considerable. The price of the Eastwater hut represented the value of an established building in a convenient place, and the goodwill that went with it.

Membership of the Club has decreased by about twenty two during the year. It is sad to recall that two people have died. Robert de Joly was one of our Honorary Members and details appeared recently in the Journal, but we also lost Wilfred Sharpe. Although known recently to only a few of the older members of the Club, E.W. Sharpe was very active in the early years of Wessex. He joined the Club in 1935, and was the Club Chairman at the beginning of the war, having often been acting Chairman before this. Most of his caving was done with Jack Duck, on the Lamb Leer and Wookey Hole surveys. He was a gentle and friendly man, and when he left the district during the war he continued to keep in contact with Frank Frost and other members of the Club. When he died last November, at the age of 77 he had been a Wessex member for thirty three years. We have lost other members too.

One or two we know about, but it is difficult to decide why membership has diminished. The numbers in most Clubs seem to fluctuate and possibly there is a diminished interest in the community. It may be the result of delayed shock following the rise of subscriptions. It could be a group expression of disagreement with Club policy, perhaps related to the building of Upper Pitts, or it could reflect on increasing interest in the caves of other regions, associated with increasing difficulty of access to Mendip caves. I do not think it means the Committee is out of touch with the general membership, as most members of the Committee are very active. There is certainly now room for the Club to expand its numbers.

It has been encouraging to note that several members have gone overseas, some for considerable lengths of time, and still retained their membership. Oliver Wells has been in the States for a long time and recently returned for a short time when most people were on holiday. Gary Pilkington is returning soon, also from U.S.A. Derek Ford, and more recently Dave Drew write to us and for us frequently (though Dave Drew does not always convey the impression that he enjoys spelunker-type caving). This year Alan Fincham went to Jamaica, where we hope one day he will be of use to us. Brian Hansford is in Rhodesia and has already reported back on his speleological activities.

Club trips have not been very well attended, (with the exception of a St. Cuthbert's trip and ladder practice and a recent trip to Stoke Lane). These have been arranged by Jenny Murrell. In some years they do well, in others badly, but they are an essential part of the Club's activities, in that they help introduce prospective members and permit people to go caving in different groups. It would be interesting to hear members' views on this topic. Do people think that by increasing the numbers of trips attendances might be improved, or do they think Club trips should be abolished altogether? Trips have been arranged to South Wales and Devon, but other areas have been visited privately. Many unofficial trips have been made to South Wales and Yorkshire. Dave Causer and Fred Davies went to Northern Spain, where bureaucratic interferences limited their caving. Nearer home several digs are being pushed hard. The Thompson, Davies, Hanwell consortium is still working Twin T's and North Hill, and Tony Dingle is digging Thrupe Swallet regularly. Eastwater Swallet is now open again, the breakthrough being achieved by Tony Jarrett, one of our recent members. Willie Stanton's dig in Reservoir Hole still continues, while "upstream" John Cornwell attacks Rhino Rift.

The Committee has met six times since the last A.G.M. and in addition once at a very short meeting immediately after the A.G.M. to appoint Committee Officers. There is one more Meeting to be held before the next Annual General Meeting. The Chairman and Secretary attended all meetings, and so did Peter Cousins (Gear Curator) and Jenny Murrell, the Treasurer (Tim Reynolds) and Tony Dingle attended five, Hugh Pearson, Steve Causer, Mike York and John Thomas attended four, Roy Staynings attended two and George Pointing one. Les Teasdale also attended one before having to resign from the Committee due to pressure of work. Committee attendances do not give a completely accurate assessment of a member's support for the Club. For instance, since it is virtually impossible for a meeting to function without secretary and chairman the dates are arranged for their

convenience. It is difficult to hold more than the occasional one without the Treasurer if we are to stay solvent. In fact Roy Staynings has given a great deal of help as Assistant Secretary, and he has also helped me with some difficult and unpleasant correspondence relating to keys of locked caves. A substantial quantity of work has been delegated over recent years to members of the Committee and others. Hugh Pearson has taken over the supervision of technical projects. Perhaps we have not publicised these as much as we should, but several projects are in the offing. The B.B.C. have shown interest in making a film on Mendip, with some leanings towards the scientific and academic side of caving. Some difficulty about who is to pay for it seems to be holding things up. It sounds as though Hugh may have some convincing talking to do, but two other possibilities, one of Bowdlerized caving songs and the other, in which the Club might be able to help with advice on a science fiction series, have also been mentioned. A lot of work has been done too, on collecting cave sound effects. I hate to think what might be included, but this is being processed on to seven inch records. The fact that this began as 2½ hours of sound will give members an idea of how much editing had to be done, and this was gathered from 120 man hours of caving. Sue Pearson has typed and duplicated some of the Committee Minutes. The remainder were done by the Secretary of the local hospital against a promise of a donation to the Family Planning Clinic. Steve Causer has handled the sale of such items as Edison cells, spares etc., as well as keeping an eye on the H.Q. construction, and Tim Reynolds has looked after the sale of surveys and occasional publications. John Letheren is still working on revolutionary cave detection devices. Mike York, in the capacity of Hut Warden has made bookings for accommodation, collected hut fees, and taken care of the administration of the H.Q. Jenny Murrell has arranged various things, major items such as Club trips and meetings, and also such essentially feminine things as tea and sandwiches at the Annual General Meeting. There has been some discussion recently on the best size for a Committee. Inevitably the eventual size is a compromise. A small Committee is much more efficient and gets through more business. A large one is more representative of all shades of opinion in the Club, but is very unwieldy. It is however, a point to which the general membership should give thought.

Peter Cousins, the Gear Curator, reports as follows:-

"Towards the end of this year we should be able - for the first time in many years - to transfer all our tackle to a new store at Upper Pitts, thus relieving Jim Hanwell of the store keeper's jobs he has held for five years. Since the past three holders of the office of Gear Curator have not been residents of Bristol the Committee have agreed to appoint next year an assistant from this area so that members living in Bristol, or S. Wales can more easily obtain and return tackle through him.

"For the first time in several years we have lost tackle - as reported in a recent Journal - and it is shameful to report that this loss can be attributed to the disregard by members unknown for the booking out systems. No one has yet admitted responsibility for this loss.

"A full programme of research and testing has been carried out during the year, and many of

the results have appeared in recent Journals. As a sequel to this an experimental sample of ladder has been in use for some months, and 250' of new ladder started last year is now in an advanced state of construction. We hold stocks of cable for renewing much of our existing tackle, which is now all over five years old, and 170' of this has already been rebuilt. Both this rebuilt tackle and the new tackle are in lengths as suggested on statistical grounds in a recent Journal viz 15' 25' and 40'.

"As members will have noticed yet another new rope is now in use; this Polypropylene Fibrillated Tape appears to be wearing well and more will be brought into use next year. Some confusion has arisen this year between caving and digging rope, and it is hoped that the latter will be distinctly dyed in the near future. We are grateful to British Ropes Ltd., who tested a sample of our used rope about four years old; this has enabled us to judge better when to scrap ropes, and should result in safer equipment. It is hoped that more tests can be made.

Inventory - at 1st Sept. '69

"Rope;	Nylon (code blue) 160', 120', 120', 80'	total 480'
	Ulstron (code blue) 80'	80'
	Ulstron code black 240', 160' 80'	480'
	Fibrillated Tape (code yellow) 160' 120'	<u>280'</u>
		<u>1,320ft</u>
	An additional 120' Ulstron has recently gone astray, but should soon be located.	
"Ladder;	Existing stock, 3 @ 40', 11 @ 20', 3 @ 10'	370'
	Rebuilt stock 1 @ 40', 4 @ 25', 2 @ 15'	170'
	Experimental 1 @ 25'	<u>25'</u>
		<u>565ft</u>
	Tackle lost earlier in Year	100'
	Tackle recently astray	40'

"Other Equipment;

Our stock of Maypole has been very low for the past two years; sections appear to be underground in remote places, and a round up for labelling is long overdue. Maypole is expensive."

He also reports that money spent on tackle this year has been lower than usual, about £10. Some £50 was spent last year, of which some £24 was spent on new tackle. The construction of this is under way, although behind schedule. The finances of our ladder building seem to be very complicated, and it is not easy to see what is tied up in stock awaiting construction, what is actually in use, what has been lost, and the value of tackle lost by depreciation. There may be a case for constituting a tighter control over the use of tackle, but it would be

a pity if this were done at the expense of ready access to Club tackle.

Apart from provision of tackle and headquarters the Club provided other services to members. The availability tends to vary from time to time, but the Club has obtained very cheaply such items as boiler suits, goon suits, boots, Edison cells, and the useful facility of discounts with some firms such as the Bristol Outdoor Centre and Surplus Supplies Ltd. While building the H.Q. we have naturally been very interested in making a percentage on these sales. Although we do not intend to lose on these in future we hope to concentrate more on the service than on the profits. It is hoped to have further details of sales at the Annual General Meeting. Sales and services to members have been the province of Steve Causer.

As well as being the Club Chairman, Jim Hanwell has been Journal Editor. He reports as follows:-

"Once again Club Journals have been regularly issued bi-monthly, and the next one in December will mark the close of Volume 10. Completed this Volume will cover more than 400 pages, accounting for members' activities over the past two years since February 1968. Even with the August number the current volume topped the 378 pages of the next largest volume (No. 8) ever produced by the Club. Add to this the Occasional Publications published, and it becomes evident that members are indeed active with their pens. In January of this year the second of our Occasional Publications was issued, being an account of Phase Three of the Mendip Karst Hydrology Research Project in the Burrington Area. With its earlier companion number the sales have more than justified this first venture into better quality publications. Furthermore, we have achieved the wide circulation which this original research deserves. Therefore, we feel confident that our Third Occasional Publication, to be released during October 1969, will equally justify the considerable effort and expense which has gone into its preparation. As many will know it is a short biography of the Club's first President, the late Herbert E. Balch of Wells. Entitled "Pioneer Under the Mendips", it has been written by William Stanton and considerable research and thought has gone in to make it a worthy tribute to mark the centenary of H.E.B's birth. We hope that members will not only purchase copies, but make this substantial publication widely publicised. We believe much of the text and illustrations will contribute a lot that is new to our knowledge of early Mendip caving, as well as accounting for the impact made by our first President. Also in preparation is yet another Occasional Publication devoted to the Mendip Floods of July 1969, an occurrence which must be fully documented for the record. Finally, members will have received a copy of the Club Handbook recently circulated. We apologise that it did not appear with the August Journal as intended, but the summer with its holidays is always a difficult time to plan things with certainty. A Handbook is never an easy document to prepare, but we hope that it will fulfil its main function of helping members to make the most of the Club, whatever its defects.

"At the very time we have stretched ourselves and finances to build Upper Pitts, there has been no slackening in our efforts to keep members in touch with the Club through its

publications. In fact exactly the reverse is true as can be seen. It goes without saying that this has not always been easy, either from the amount of time it consumes or the careful handling of our budget. With the close of Volume 10 with the December Journal I intend that someone else should take the office of Editor. It seems a fair principle that normally one Editor should be responsible for a volume, being 12 journals over two years.

"The distribution of Journals and other Club circulars has been organised once again by Peter Cousins from London. Since about 20% of the membership change their addresses during any year, his job has been more than just posting your Journals. Unfortunately, many forget or delay in forwarding us new addresses, and it has often been difficult to trace member's whereabouts. Peter has helped a great deal in minimising these problems, as well as being an important link between Editor and printer. Future commitments away from the area are likely to make it impossible for him to continue in this office after the end of the calendar year."

One understands Jim Hanwell's wish to relinquish the Editorship, once committed to continuing this beyond January it means another two years, or we lose continuity.

The cost of Journal production has increased over the last year. This is partly because everything else has increased and partly because this volume has been bigger than any previous one. The general membership of the Club ought to form views on this, and decide how much we should publish. The Wessex is a large and active club, and it is only to be expected that we should have a large amount of material to publish. If we do not do so, we risk losing much information that should go on record. Also, the Journal is accepted as a useful source of scientific information by many cavers in other districts. On the other hand, one would not like to see the facilities offered by the Club reduced to provide money for unwanted publications, and a balance obviously has to be found. I feel the Occasional Publications are in a different category. The Club floated the first, but subsequent issues are intended to be paid for out of the proceeds from the previous. Ultimately the Club stands to profit financially from these, and publishing the information they contain is in accordance with the objectives of the Club.

The Library has been the care of Christopher Hawkes. The books and Journals have been housed in his house in Clifton. On the first Tuesday of each winter month there has been a library night, to classify the material. The meetings have been quite well attended. The Library continues to increase in size as we exchange with several other clubs. It is intended eventually to put some of the library in Upper Pitts, but it is better not to put the more valuable books there. Members are reminded that the Library is theirs for use, and if they want information they should write and ask for what they need. A stamped, addressed envelope helps Club funds. It is always worth writing and asking if you do not happen to know the exact reference, as the Librarian may have come across the information you need while browsing. The Librarian can buy books for the Club, and if there is any publication you feel the Club should have write and suggest it. The Club has an enormous pile of other peoples' caving literature. Much is run of the mill and barely related to the subject, but

amongst this is a lot of valuable information.

Figures for the receipts for accommodation at the hut, and the number of man/nights are not yet to hand. These are important, and are, we hope, the justification for building Upper Pitts. It is hoped they will be available for the Annual General Meeting.

The work of the Secretary is made much easier by a helpful Committee, prepared to accept some of the routine paper work. Roy Staynings has done a great deal of this, and has relieved me of the work of despatching keys, completing permits and ironing out difficulties which arise due to postal delays and losses. Tim Reynolds has taken on the administration of the affiliated clubs. The Committee as a whole has worked in harmony through the year, and Jim Hanwell's help as Chairman has been invaluable.

In closing the Secretary's report one likes to have a thought to the future. Last year we promised to consider the acquisition of a cottage in South Wales. We are still undecided about this. With the improvement to roads to South Wales it might not pay its way. I would like the Club to think about this again, and give us a mandate before we embark on a programme of Wessex colonialism. The Club ought to be thinking of a more ambitious programme of events, such as a really well organised long distance expedition. Then too, nearer at hand, the Club must decide on its attitude to the organisation of caving. What are our feelings about a National body to coordinate or supervise the caving activities of all areas in Britain? Do we want anything to do with this? Do we feel that present attempts are worth the effort being put into them? My own feelings are that we should tread warily lest we find our local wishes frustrated by a remote and bureaucratic body which would not recognise a dirty boiler suit if it saw one; but on the other hand, if it is necessary for us to bring pressure on Authority to reverse unreasonable decisions, (such as the closure of Mossdale) such an organisation might be necessary. Unfortunately it is already clear that the bigger it gets the woollier become its ideas. Our most pressing need on Mendip is now some more caves. There have been no great finds this year. Perhaps the accomplishment of the new Head Quarters will help this. We know, from Digger Harris' dowsing evidence, that vast caverns underlie North Hill, and the amount of water coming out of Cheddar lend encouragement to the Reservoir Hole and Rhino Rift efforts. The Georesistivity gear is still in our possession, a report on the work is to be published soon.

As we move towards the 1970's we have many plans in various stages of maturity. The Journal will be publishing much new material, there are several promising digs, and several new ventures in the early stages of planning. We have every reason to expect the Club to continue to prosper in the year ahead.

Donald Thomson

Leigh-on-Mendip.

September 1969.

WESSEX CAVE CLUB

Balance Sheet as at 31st August, 1969

<u>30/9/68</u>		<u>Year to</u> <u>30/9/68</u>	
	<u>Hut Fund</u>		
£1,640	As at 1st October, 1968	£2,217 8 10	
	<u>Add:</u> Proposed transfer from Accumulated Funds for 1969	260 0 0	
275	Period subscriptions received in year	116 3 0	
147	Donations	57 4 1	
107	Sale of scrap metal	- - -	
36	Interest on investments	24 0 0	£ 483
42	Proceeds from disposals of club huts	70 0 0	
-			
<u>2,247</u>		<u>2,744 15 11</u>	
	<u>Less:</u> Period subscriptions relating to current year	52 15 0	1,500 234
30			
<u>2,217</u>		<u>£2,692 0 11</u>	<u>2,217</u>
	<u>Survey Fund</u>		
	As at 1st October, 1968	40 16 5	
	<u>Add:</u> Profit on sale of surveys in year	4 17 11	
41		<u>45 14 4</u>	41
	<u>Accumulated Funds</u>		
	As at 1st October 1968	277 10 1	101
	<u>Add:</u> Surplus for the year	298 16 1	-
		<u>576 6 2</u>	25
			635
			80
	<u>Less:</u> Proposed transfer to Hut Fund to be approved by 1969 A. G. M.	260 0 0	
278		<u>316 6 2</u>	
	<u>Current Liabilities</u>		
500	Short term loan (unsecured)	300 0 0	
24	Subscriptions in advance	71 10 0	
14	Mossdale Memorial Fund	14 6 0	
25	Sundry creditors	139 3 11	
		<u>524 19 11</u>	
		<u>£3,579 1 4</u>	<u>£3,099</u>
<u>£3,099</u>			

<u>New Headquarters Project</u>	
<u>Freehold land and buildings - Eastwater</u>	
Cost to 1st October 1968	£ 482 18 2
<u>Add:</u> Expenditure during year	3,966 6 6
	<u>4,449 4 8</u>
<u>Less:</u> Grant receivable	1,918 0 0
	<u>£2,531 4 8</u>

<u>Hut Fund Investments</u>	
<u>Somersetshire Building Society P shares</u>	
Balance at bank and cash in hand	169 1 3
	<u>169 1 3</u>
	<u>2,700 5 11</u>

<u>Survey scheme</u>	
Stock of surveys at cost	18 8 5
Balance at bank and cash in hand	27 5 11
	<u>45 14 4</u>

<u>Current Assets</u>	
Stock of goods for resale	110 19 8
Balance of grant due but not yet claimed	531 0 0
Debtors and payments in advance	11 11 6
Balance at bank	179 9 11
Cash in hand	- - -
	<u>833 1 1</u>

I have examined the above Balance Sheet and attached Income and Expenditure Account and notes on the accounts which I find to be in accordance with the books of accounts. The financial records are well kept and to the best of my belief the accounts fairly disclose the financial position of the club for the eleven months ended 31st August, 1969.

<u>Wells</u>	<u>C. H. KENNEY</u>	
<u>22nd September, 1969</u>	Chartered Accountant	<u>£3,579 1 4</u>

WESSEX CAVE CLUB

Income and Expenditure Account for the eleven months

ended 31st August, 1969

Year to 30/9/68			Year to 30/9/68		
£ 50	Tackle expenditure	£ 7 9 6	£ 361	Subscriptions for the Club year	£ 360 0 0
2	Club dig and Georesistivity project expenses	2 1 6	24	Affiliation fees	31 10 0
196	Journal	268 14 7	7	Entrance fees	6 15 0
2	Library expenses	5 11 0	24	Donations	10 19 0
36	Insurances - Third party	£ 32 10 0	2	Tackle fees	1 2 6
1	- duplicator	1 10 0	1	Use of duplicator	- - -
		34 0 0	2	Publication sales - Volume 1 reprint	£ 15 0
		25 12 4	4	- Volume 8 supplement	1 1 0
58	Stationery, postages and telephone	6 16 1	29	- Journals	14 19 6
10	Meetings expenses	4 11 9			
3	Bank charges and cheque books	1 18 2			
14	Lamb Leer expenses	3 0 0	21	Profit on annual dinner and parties	16 15 6
3	Subscriptions - Cave Research Group	2 0 0	3	Charterhouse Caving Committee permits	6 12 6
	- Council of Southern	2 0 0		Sundry receipts	8 0
2	- Caving Clubs	1 0 0			
-	- Cambrian Caving	6 0 0			
-	Charterhouse Caving Committee - Share	8 13 0			
	of expenses	- - -			
5	Expenses re exhibition at Lewis'	5 13 6			
-	Loss on annual dinner	9 3 6			
-	Replacement of G. B. locks	10 3 3			
-	Thefts from Hillgrove	396 8 2			
382		37 14 4			
96	Surplus carried down	£ 434 2 6	£ 478		£ 434 2 6
£ 478		£ 298 16 1	£ 96	Surplus brought down	£ 37 14 4
		£ 298 16 1	139	Surplus on running club huts (as note 1)	119 18 5
£ 288	Excess of Income over Expenditure carried	£ 298 16 1	42	Net surplus on goods supplied to members (as note 2)	123 19 1
	to Accumulated Funds	£ 298 16 1	11	Profit on sale of Occasional Publications	17 4 3
		£ 298 16 1	£ 288		£ 298 16 1
£ 288		£ 298 16 1			£ 298 16 1

WESSEX CAVE CLUB

Notes on the accounts for the eleven months

to 31st August, 1969

1. <u>Surplus on running club huts</u>	<u>Hillgrove</u>		<u>Eastwater</u>		<u>Upper Pitts</u>		<u>Total</u>	
	£ 198	£169 5 10	£ 30	£ 7 14 9	£ -	£ 47 15 8	£ 228	£224 16 3
Fees received	.....	.....	.....	.....	.....	.....	.....	.....
Less: Expenses:-								
Rent	10	10 0 0	5	1 5 0	-	-	15	11 5 0
Rates	6	6 5 1	-	-	-	6 0 0	6	12 5 1
Insurance	8	10 7 0	1	-	-	3 10 0	9	13 7 0
Electricity	-	-	-	-	-	3 3 0	-	3 3 0
Calor Gas	20	7 15 0	4	-	-	10 0 4	24	17 15 4
Coke	23	24 19 2	-	-	-	-	23	24 19 2
Minor fittings	-	-	-	-	-	12 4 3	-	12 4 3
Repairs and renewals	12	9 9 0	-	-	-	-	12	9 9 0
	.....	.....	.....	.....	.....	.....	.....	.....
	79	68 15 3	10	1 5 0	-	34 17 7	89	104 17 10
	.....	.....	.....	.....	.....	.....	.....	.....
Surplus for the period	£ 119	£100 10 7	£ 20	£ 6 9 9	£ -	£ 12 18 1	£ 139	£119 18 5

2. Surplus on goods supplied to members

Deficit on the sale of :-			Surplus on the sale of :-		
£ 1	Carbide	£ - - -	£ -	Carbide	£ 1 4 1
1	Club badges	- - -	3	Electrolyte	4 4 2
8	Club ties	- - -	-	Club badges	2 3
-	Carbide lamp spares	4 4	-	Club ties	3 0
2	Nife and Edison lamp spares	4 15 7	3	Carbide lamp spares	- - -
			38	Nife cells	3 0 0
			8	Edison cells	120 5 6
			2	Car badges	- - -
-					
12		4 19 11			
42		123 19 1			
.....		.....	.....		
£ 54		£128 19 0	£ 54		£128 19 0

WESSEX CAVE CLUB

Notes on the accounts for the eleven months (Continued)

to 31st August 1969

3. As was done last year, the total of period subscriptions received during the year has been credited to the Hut Fund account. In return the Hut Fund has been charged this year, and will be charged for the next four years, with the proportion of the period subscriptions which relate to the year in question. The sum so charged has been included in the figure for subscriptions. In the eleven months to 31st August 1969, 15 full members and 6 joint members have taken out period subscriptions.

4. Included in the Accumulated Funds are profits from the sale of occasional publications as follows:-

Year to 30/9/68	£10 12 3
11 months to 31/8/69	17 4 3
	£27 16 6

It is intended that this sum and also profits from future sales should be used to finance occasional publications.

5. The short term loan of £300 is interest free, and has been raised privately to provide bridging finance during the construction of the new Upper Pitts H.Q. There is no charge on any of the assets of the club as a result of this loan.

6. The total figures of cash in hand and at bank appearing on the Balance Sheet are:- £375 17 1d. This is made up as follows:-

Midland Bank Ltd., Solihull -	
Current account	£276 8 4
The Fidelity Bank,	
Philadelphia, U.S.A.	49 8 9
Cash in hand with H.Q.	
Development Officer	50 0 0
	£375 17 1

7. The figure of Stock of goods for resale is made up as follows:-

Carbide	£ 2 13 4
Electrolyte	16 0
Club badges	4 19 9
Club ties	5 15 6
Carbide lamp spares	2 13 0
Nife and Edison lamp spares	13 8 1
Nife cells	5 0 0
Edison cells	1 10 0
Occasional publications	35 14 0
Goon suits	38 10 0
	£110 19 8

8. The expenditure to date on the new H.Q. at Upper Pitts is as follows:-

Land, fencing, car park and paths	£454 0 2	
Site drainage and septic tank	73 12 6	
(no grant available)		£527 12 8
Erection of shell	2,924 0 0	
Floors, ceilings, partition walls, internal joinery, paint and plastering	316 10 0	
Wiring, electrical and gas fittings	195 14 5	
Plumbing, hot and cold water system and drainage	131 0 11	
Central heating installation and boiler	354 6 8	
(eligible for grant)		3,921 12 0
		£ 4,449 4 8

The total grant receivable is £1,918 which is 50% of £3,836 (the estimate of the cost plus fittings in June 1968). As shown above £3,922 has been spent on the shell plus fittings and so the whole of the grant is now due. To date £1,387 has been received, leaving a balance due of £531 which is shown on the balance sheet under current assets.

It is estimated that further expenditure of approximately £200 will be necessary to complete the hut. This figure has not been included in the accounts.

9. At 31st August 1969 the club owned the following items of equipment:-

Roneo duplicator  
Ladders, ropes and caving equipment  
Hut furniture and equipment

All these items were written off in the Income and Expenditure Account in the year in which they were purchased, and so are not represented on the Balance Sheet.

HON. TREASURER'S REPORT  
Eleven months to 31st August 1969

The experiment, suggested at last year's A.G.M., of preparing the accounts to 31st August has proved to be of considerable help, and has given me much more time to produce the accounts. In addition, it has proved possible to publish the accounts and the Hon. Treasurer's report in the Journal prior to the A.G.M., which gives members more time to study the accounts than in previous years. So, from my point of view the new accounting date has been a great success, and I would like to propose that the accounts continue to be made up to the 31st August in each year. However members should note that since the accounts have been made up to the 31st August this year, the figures are for eleven months as against the twelve months for the accounts for the previous year. Normally September is a quiet month financially for the Club with very little expenses, and no income apart from hut fees. In view of this I doubt whether the final surplus would have been much different if the accounts had been made up for the full year.

The surplus of subscription income over the general running expenses of the Club is very much down for this eleven months - £37 as against £96 last year. The main causes were as follows:-

Journal - an increase of £73. This is caused simply by the increased volume of material published and the increased use of photos.

Loss on Dinner - increased charge to Club of £27. This was caused by a higher initial quote by the Wookey Hole Inn coupled with a misunderstanding regarding a 10% service charge.

Thefts from Hillgrove - cost £10. This was made up by £2 from the electricity meter and £8 from the fees box. In the last couple of years it had not been thought worthwhile to increase the security of the fees box at Hillgrove, since it would have cost a lot to do the job adequately. However, now we have moved to Upper Pitts it is intended to make the fees box and meters much more burglar proof.

Donations - a decrease of £13. There is nothing very much that can be done about this, except hold out the hat!

Publications sales - decrease of £18. At present these are handled by the Hon. Treasurer who does not have the time to do the job properly, and he hopes that someone will come forward to do the job during the coming year.

The surplus made on the Club huts during the eleven months was very gratifying, especially in view of the changes that have taken place. Hillgrove was vacated on the 30th June 1969, and the surplus of £101 for the nine months to that date compares very favourably with the surplus of £119 for the whole of the last Club year. It is also pleasing to see that Upper Pitts has made a surplus in its first two months of operation, but it is too early yet to make any firm predictions about possible surpluses. However, it is interesting to note that in the same two months period last year the gross fees collected from Hillgrove were £34 as against £48 collected from Upper Pitts. But, against this probable fee increase must be set the very much higher running costs of Upper Pitts, which at a very rough estimate will be as follows:-

Rates	£36 per annum
Insurance	10 per annum
Electricity	20 per annum
Calor gas	600 per annum
Repairs & renewals	20 per annum
Heating & hot water	<u>54 per annum</u>
	<u>£200 per annum</u>

On the basis of the fee income from Hillgrove, with the expenses at the level shown above, Upper Pitts would just about break even. But, in view of the larger number of bunks at Upper Pitts the fee income should be higher, and so it is probable that the new hostel might return a surplus in the order of £20 to £30 per annum. However, this figure does not make any allowance for major repairs, and it is this fact that is behind the proposal for the A.G.M., to create a Hut Maintenance Fund.

As in previous years, nearly all of the surplus on goods supplied to members arises from the sale of Nife and Edison cells. The remainder of the items sold are in the nature of 'a service to members' and do not bring in much income for the Club - if any. The sales of Occasional Publications have done well this year. No. 1 is now sold out, and No. 2 has sold very much better than estimated. It is hoped eventually, when sufficient profits have built up from the sale of these publications, to create an Occasional Publication Fund which like the Survey Scheme would be supported from the sale of these publications.

Of the final surplus of £299, £17 relates to Occasional Publication sales, and £13 to the surplus from Upper Pitts which it is proposed shall be retained until it can be transferred to a Hut Maintenance Fund. After these two items have been deducted, this leaves a balance of £269, and so, after leaving a bit for the Accumulated Funds, I would like to propose that £260 be transferred to the Hut Fund towards the completion of Upper Pitts. As was done last year, this transfer has been included in the accounts.

The overall financial position of the Club at present appears healthy, and once the new H.Q., is finished the Club should have about £250 in the bank without including any of the subscription income that will be received from the 1st October onwards. But, the running expenses of the Club are creeping up on the subscription income, and this coupled with the loss of the £80 to £100 surplus made in previous years by the Hillgrove hut means that next year's committee will have to watch expenses closely whilst trying to increase the subscription and other sundry income of the Club. In this context it should be noted that an increase of the membership of twenty will bring in an extra £30 of income with very little increase in expenses since we over produce on the Journal by 30 copies at the present.

To sum up, the Club now has one of the finest caving club H.Q.'s in the country and far from requiring a long term loan will have, when the new H.Q., is finished, a comfortable balance at the bank. So it is now up to the members to get down, do some caving, and get the Club moving forward again.