AGM+DINNER PROGRAMMES -p6 AGM REPORTS -supplement UBSS PROCEEDINGS REVIEWED -p8

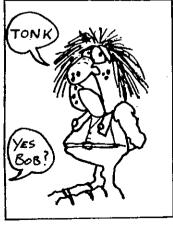
MCG NEWS 152, May 1982, featured Tony Knibbs' decision to forge ahead with a new Longwood/August System cave survey. It also attempted to put right (incorrectly as it emerged) the original survey's problems with a wrong northing. The MCG is now publishing the new survey, which is a photographic compilation of the previous work and the numerous surveyed additions. The new survey is to a scale of 1:480, and the MCG will in due course make it available to the Mendip Cave Survey Scheme. Enquiries about survey sales should be made to TK or any other MCG committee member. Tony Knibbs writes below about the work involved in producing the new survey...

The Longwood/August System survey has been in circulation for over twenty years. It was produced by Mike Rennie and other MCG members, including myself, over a period of two years between 1959 and 1961.

AGM/DINNER REMINDER

1985 MCG AGM, at 3pm, Nordrach Cottage, 23rd March. In the chair: Arthur Spain. ANNUAL DINNER, The Star, Wells, 7.30 for 8pm. Coach arranged, leaving the Cottage 7pm, Hunters 7.10pm, returning from The Star at 11.45pm. Dinner tickets £8.50.ea from Tony Knibbs (01.997.2032).

Bob Speleo B





WITH APOLOGIES TO MR. TONK KNIBBY, THE WELL-KNOWN TYPING ERROR.

Since the survey was issued, numerous discoveries have progressively put it more and more out of date. It was the completion in 1982 of the Renolds Passage Extension, by Wessex members Alison and Pete Moody, which finally persuaded me that it was time to produce a revised survey. This very determined exploration, together with discoveries by our own Group and by Mike Haselden of SpeleoRHAL, has produced almost 1000 feet of additional passage and extended the depth to 574 feet.

There has occasionally been criticism of the accuracy of the survey. Shortly after the survey was issued, it was found that the true north arrow was 37° out of alignment - it pointed 323°. Later copies were modified to correct this error, the reason for which was never fathomed. An understandable concern arose that other azimuth errors existed within the survey plan. Accordingly, I set out to run some simple practical checks.

I borrowed Mike Rennie's survey notes, hoping to run a few checks on accuracy in various parts of the system. However, the lack of permanent survey marks and the highly individual nature of the notes themselves makes it impossible to re-create precisely suitable survey legs. My own checking was therefore limited to taking several bearings along straight sections of passage, using a calibrated prismatic compass, and comparing the results with the drawn survey.

continued on page 12 ...

# BBEQEOUMTE

(Saturday date show				OTHER	REGIONS	•
March 9	over-booked! .	•	.	•	•	•
16	Kingston (8) . CSCC meeting, Pridd	•		•	•	•
. 23	MCG AGM + DINNER .		1.	•	•	•
	STOKE LANE retry (J ST CUTHBERTS (Tony					
	BONE HOLE (Neil Hut-					
30	etc etc					
30	Racal Decca (12) .	•	•	•	•	•
April 6	EASTER ON MENDIP .		MEREGILL HOLE (Derek Walsh) NPC long Yorks weekend 5-8 April			
13	long Mendip weekend	5-8 April	long Yo	rks week	kend 5-8 <i>i</i>	April
20	Adrian Duckett (10)	•	:	•	•	•
27		•	CRAIG-Y	-FFYNNOI	N (Roger N	Wallington) SWCC
May 4	GB GREAT CHAMBER (A		1.	•	•	•
	long Mendip weekend Cheddar Folk Festiv					
11				•	•	•
18	British Cave Rescue					
25	MENDIP BANK HOLIDAY . LINK POT (Neil Hutchinson long Mendip weekend 25-27 May long Yorks weekend 25-27					
June l		•	TUNNEL	CAVE (M:	ike Haselo	den) SWCC
8	:		•	•	•	•
15 22	MENDIP GEOLOGY (Mal	coim Cotter)	•	•	•	•
29	Racal Decca (12) .	•		•	•	•
July 6	EASTWATER CAVERN (M	iko Pugravo)				
oury o	lottery draw for Ot		•	•	•	•
	Battle of Sedgemoor	300th annive				
13	Adrian Duckett (15) Yorkshire Ramblers		·  •	•	•	•
20	TOT VOILTE VOIDTETS	CIUD (12)	1.	•	•	•
27		•	PYRENEE	s '85 ('	Tony Knibl	os) Arbas

#### THE CHISWICK ARMCHAIR MEET

#### 9pm prompt in the back-room of the Mawson Arms!

Thursday 14 March : Slide & Slip with Smith

Thursday 11 April : The entire contents of Geoff Barton's caving handbag Thursday 9 May : Son of Geoff'n'Roy - part 2 from the video-speleos

Thursday 13 June : this prime venue is vacant; no reasonable offer refused

# Planners move to escue rare bat

### **HAUNT THREAT** BY BULLDOZERS

By Ian Tabrett

URGENT action has been ordered by Woodspring planners to save the haunt of the rare Greater Horseshoe bat.

BRISTOL EVENING

POST

13 APRIL 1983

Investigations are to start in a bid to find ways of linking conservation groups and Bristol University to buy 20 acres of Roman mine-workings on Dundry Down, Dundry, near Bristol.

Another possibility is that

it could be scheduled as a site of special scientific interest under the Wildlife and

Countryside Act.
The district council's southern area planning committee was told last night that farmer Mr John Pearce had flattened about half of

the downs which were pitted

with shafts and spoil heaps.
Planning officer Mr
Richard Dowding said it was
an important site because of the bats living and feeding there.

It was also of great interest geologists, industrial archaeologists and biologists.

#### Pointless

"The work which has already been carried out makes a mockery of the conservation zonings on this land," he told members.

However, it was pointless to take legal action because it should be made to save the rest of the area which had not

so far been touched.

Councillor Bill Cox (Con. Winford) said the parish council was concerned over what had happened and there were fears work might start soon to bulldoze the rest of

But later Mr Pearce said at his home in Dundry that he had no intention of trying to improve the area covered by surviving mine-workings.

He began levelling nearly 20 years ago thanks to an improvement grant from the Agriculture Ministry and only recently finished tidying

it ready to sow grass seed.
"The land was covered with holes and the surface would often give way suddenly under the weight of animals

or machinery.
"Over the years I have lost 40 or 50 cattle and I just couldn't go on like that. The place was a nightmare and I couldn't risk the lives of my

men there.
"I offered to sell the land to the council some years ago for £500 an acre, but they wouldn't buy it. I shall be delighted to do a deal now, providing they pay the right price."

G G Ε E Α Α The BEC are going to the Gouffre Berger this summer. Several of their R R members are desirous of expedition carbides, SRT gear, etc. Any MCG member with gear to sell is invited to make contact with the BEC in W W the usual way (at the Hunters' Lodge) and negotiate prices in the Α Α Ν N usual way (over several pints). Т T E Ε D D .. GEAR WANTED ... GEAR WANTED ... GEAR WANTED ... GEAR WANTED ... .. MCG CAVING SHOP ... MCG CAVING SHOP ... MCG CAVING SHOP ... MCG CAVING SHOP ... M Μ C C G The MCG Caving Shop can get you anything you need, and better any G prices. Before you go elsewhere for your caving, walking, boardsailing or mountaineering needs, why not contact Phil Ingold, on 0442.42029. Malcolm Cotter has a range of books, and furry suits, overalls, etc. S S Η Η Contact him at 07842.52643. 0 0 Ρ P .. MCG CAVING SHOP ... MCG CAVING SHOP ... MCG CAVING SHOP ... MCG CAVING SHOP ...

GEAR WANTED ... GEAR WANTED ... GEAR WANTED ... GEAR WANTED ...



#### MCG COMMITTEE

Secretary: Tony Knibbs 85 Cavendish Ave, London W13 OJY. 01.997.2032h, 01.546.7741 x2199w.

Treasurer: Mike Lovell 4 Settrington Close, Loddon Park, Earley, Reading, Berkshire. 0734.663747h.

Meet Secretary: Geoff Barton 5 Cricket View, Princes Road, Weybridge, Surrey. 0932.49241h.

Tacklemaster: Roy Kempston 13 Florence Road, College Town, Camberley, Surrey. 0276.34338h.

Cottage Warden: Paul Merron 21 Howberry Road, Thornton Heath, Surrey CR4 8HZ. 01.771.0666h.

Recorder: Ian McKechnie 30 Brittain Road, Hersham, Walton on Thames, KTl2 4LR. 0932.228292h.

Editor: Jonathan Roberts 17 Kent Avenue, London W13 8BE. 01.997.2916h, 01.278.3825/3888w.

Cttee Member: John Pudduck.

CAVING ACCOMMODATION is available at the MCG, Nordrach Cottage, Charterhouse on Mendip, Blagdon, Bristol BS18 6XW. OS map ref: NGR ST.5147.5606, 1:50000 sheet 182.

Guest groups requiring accommodation should apply in advance to: John Miriam, 44 Chesterfield Road, West Ewell, Surrey KT19 9QP. 01.393.3955.

WEEKLY MEETINGS are held at the Mawson Arms, Chiswick Lane South, London W4, on Thursday evenings from 8.30pm. Close to A4/A316 Hogarth Roundabout. Nearest buses: 290 in Chiswick Lane North, and 27,91,237,267,290,E3,E4 in Chiswick High Road. Nearest tube: Turnham Green.

... Mike Lovell remains at the same house but his address is ever so slightly different now: 4 Settrington Close, Loddon Park, Earley, Reading, Berkshire. 0734.663747. Don't let this subtle change put you off paying your 1985 subs, now two months overdue. Give Mike a ring if you know you have paid up but haven't had your membership card

#### ... HI THERE !

Two new probationary members have joined the fold:

Grant Shephard, 162 Mill Lane, West Hampstead, London NW6. 01.828.9733 x308.

Richard Stansfield, 9 Croft Way, Frimley, Surrey GU16 5LN. 0276.684983 ...

... Meanwhile Louise Curley has convinced the committee that she has grown up enough to be a full member. Congratulations Louise. The thing that clinched it was that one of the training trip members accompanying Louise had endorsed the application form "Nice little mover" ...

... The land in which Nether Wood Swallet resides was apparently sold twice during last year, the first owner removing the concrete pipes that we had installed and the second owner so horrified by the resultant mess that the depression was rapidly filled in. There is no encouraging news yet from the new owners, but we have been in touch, and miracles might just happen ...

... Miracles, too, might happen on the matter of land purchase next to the cottage. More details perhaps at the AGM ...

... A new, larger, more efficient fridge will shortly grace the kitchen of Nordrach Cottage. Two (smaller) waste bins will then be provided, one for paper to be burned as and when convenient in the grate, and the other for non-burnable refuse to be left for the dustmen on Monday mornings ...

... UBSS's otherwise immaculate description of Charterhouse Cave is somewhat marred by its grid reference: ST3775.5620. This places the cave just west of the M5 at Loxton, opposite Crook Peak - nowhere near GB at all. Perhaps it's really an attempt by UBSS to protect the cave's formations during Cave Conservation Year ...

... Readers of the January/February 1985 DESCENT Magazine will have observed a correspondent argue the case for open caves, as opposed to locked caves. It can only be coincidence that a few days' later (Saturday 2nd February) someone using the same name, in company with others, was encountered late one night at Fairy Cave Quarry. Matters are believed to be in the hands of the Police ...

... The MCG cottage's water system (and cistern) froze up somewhat during the recent cold weather which brought galeforce winds, snowdrifts and black ice, even as far as the south-eastern heartlands of Orpington. This was only the second time the cottage's water had frozen, and the first time that freezing had been extensive; fortunately no damage was done thanks to generally effective pipe lagging, and everything had been successfully thawed out by Saturday evening 2nd February, having been discovered late on Friday 1st ...

... The wind must have been vicious the previous week, as other caving cottages were less fortunate. The BEC's Belfry Cottage water tanks were filled with slush while their water main was frozen underground; and the Wessex's Upper Pitts HQ saw its hot-water system freeze the previous Wednesday. Even the Hunters' had a touch of frostbite in its pipes. All in all, Roger Wallington's cottage design, and the builders, have served us proud at Nordrach ...

... Anthropomorphism is a common habit of car owners, who transfer all sorts of human likes and dislikes into that hunk of metal, plastic and rubber that is the modern motor car. Some cars are of course not so modern. One such, an Austin Maxi GYB...K, which formerly owned Mr AJ Knibbs, has passed on due to career developments. AJK would like to thank all those who consorted with the Maxi, as passengers or mechanics. Mr Knibbs is now believed to have transferred his affections to a French model ...



Overhead from a newly-accepted Full
Member conversing with Alan Mellon:
FM 'You take your life in both hands if
you come in the shower with me.'
AM 'What do you mean by that?'

FM 'Come in the shower and find out.'

THE ALTERNATIVE SKI-ING HOLIDAY

Following the success of the 1984 Majorca trip, it is proposed that we do something similar for 1985... Possibly Greece or one of the islands (Crete looks a good bet).

Christmas & New Year seems the best time to go - it's warm, uses up less annual leave, and is a lot cheaper.

More details forthcoming soon. If you are interested or have any ideas or information, please contact Ade Duckett 01-572.2374, to book YOUR place in the sun for next winter.

[Editor's note: attached to the above scribble was a note from the author, Adrian, apologising for the rushed copy "but I'm off ski-ing with Louise - see you soon - all the best".]

A SYMPOSIUM on stone quarries in Surrey is to be held on Saturday 16th March in East Croydon, during the afternoon, at the United Reformed Church Hall, Addiscombe Grove, Croydon (3 minutes from BR East Croydon), 15.30 to 19.30. Those wanting to go underground or ramble round the Merstham area have the option of several trips on Sunday 17th March, meeting at Merstham BR at 10.45 - bring suitable clothing and wellies/boots!





Preparations for the AGM and Dinner on 23rd March are hotting up. Here is a events check-list - enter the competitions at your peril, but if you don't enter, someone else may be gunning for YOU!!...

====AGM, Nordrach, 3pm=====

HECKLE THE COMMITTEE OR

STAND FOR ELECTION OR

Option for committee members only HARANGUE THE AUDIENCE

T-SHIRT DESIGN JUDGMENT
Get your entries in BEFORE the AGM, please

EMBARRASSING PICTURE COMPETITION
There's still a few members who'll escape unscathed,
so get out your photo archives
and make sure no-one's allowed to get away with it,
especially not your nearest and/or dearest.
The Censor's rules have regrettably been mislaid...

MAJORCA SLIDE SHOW
Watch the Famous Five survive Customs, chasms,
caverns, Christmas and cervezas

DRINK ONE BARREL OF BEER
Steady now, there's another one this evening

=====Annual Dinner, The Star, 7.30pm======

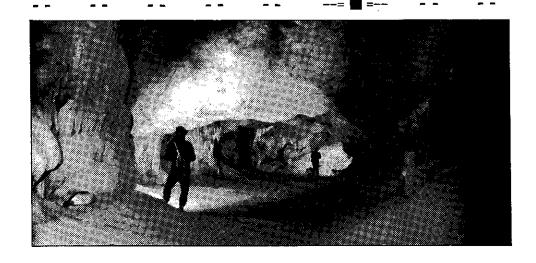
FEAST A LA MENU See MCG NEWS 175 for mouthwatering details

> SECRETARY'S SHORT STATEMENT No opting out permitted

LIMERICK COMPETITION
Only 5 lines per limerick, please.
Poet Laureates could try a
Clerihew competition instead!

THE BOB SPELEO AWARDS FOR 1985 Co-ordinated (?) by Denise Samuel and her retinue - nominations to DS, 01.997.2032

MCKECHNIE'S MYSTERY MELODRAMAS & MUSICAL MAESTROS



√ in CAL PESSO

MCG Majorca

trip, 1984

ADVERTISMENT - or who ever heard of the Trades Descriptions Act anyhow...

by Helen S and Susan T

HAVE YOU GOT A LIGHT, Mac ? Is it on full beam ?? All right then, we're off - underground...

But let's begin at the beginning...

Have you ever felt the urge to have a quiet

relaxed peaceful weekend

in the country ?

In darkest Somerset ??

Then we've just the thing for you: for as little as £5 (plus matches and Mars bars - say £10) you too can sample the delights of the Somerset countryside - with a Troll's eye view.

Ever felt the urge to get back to the Troglodite era? Well, now you're there, minus the daylight and plus the latest in trendy underground fashion - the boilersuit - the SUPERNEW fashion accessory you simply can't be without. And if you want to keep AHEAD, get a bat!

It's rather like going on the tube but not so noisy and less claustrophobic. You too can savour the roar of the water, the smell of the carbide - the ultimate experience in darkness.

SAFETY FIRST - There is absolutely no danger of being run-over by a 267 bus. And inside information reports that it is a fast-growing sport for females.

Experience the exhaust fumes while pushing a Transit up a l in 4 hill !!

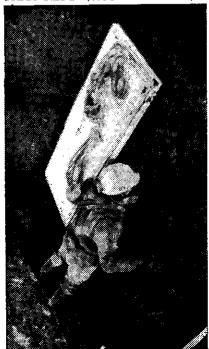
The best part is sliding down the waterfalls...great fun. (Best done on one's derriere but frontwards is more exhilarating although not recommended for those with ample chest sizes.)

Just send for a free brochure and you'll be amazed at what you get...

Seriously though, it's a worthwhile way of spending a weekend and beats the till in Woolies any time.

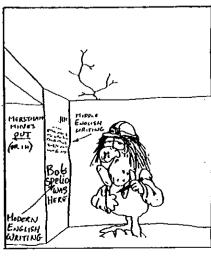
You'll return worn out but for anyone with just a little cash in hand we thoroughly recommend this jolly pastime - or, better still, give the money to us and we'll go for you!

Turn 90° to make better sense... the very first few steps at UBLEY HILL FARM RIFT (MCG NEWS 174)





Bob Speleo &

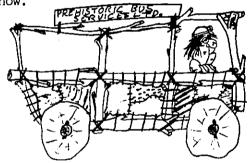




### TOP OF THE PROCS.

THE DIFFICULTY with a rave review is that one never knows which overworn superlatives to use. Perhaps the best thing is just to describe the animal/vegetable/ mineral which has been so strongly admired - and hope the reader agrees with the reviewer. The UBSS PROCEEDINGS would not normally be an instant choice for stardom: as the yearly academic organ of the University of Bristol Spelaeological Society, its tones are carefully modulated with learned references and cautious statements. Indeed many of the individual papers within its red covers have assisted - or are a boiled-down version of - their authors' PhD theses and suchlike. But it is the November 1984 edition of the Proceedings which is a must for MCG members interested in their favourite caving district, and for those with any caving, mining or industrial archaeological interest in the Blackmoor/Charterhouse/Velvet Bottom area. Jonathan Roberts writes further...

The lesser articles in the 1984 UBSS PROCEEDINGS are devoted to a review of some recent caving publications, and a note about a fossil cave feature in the site of Chepstow Bus Station, of all places, which has implications for the formative history of Otter Hole and its drainage catchment, and possibly for prehistoric bus services too, for all I



The three big 'uns are:

- \* Uranium-series dating of speleothems from Mendip caves - No.1 Rhino Rift
- \* Charterhouse Cave exploration, geomorphology and fauna
- \* Cornish miners at Charterhouse-on-Mendip.

URANIUM-SERIES DATING may not seem a big turn-on, but means that you can date the age of cave formations (and, by implication, the latest age for cave passage formation) using a technique similar to carbon-dating tests for animal and vegetable remains. It works for periods up to about one-third of a million years ago. In the speleological context, the method requires testing of specimens of formations from different parts of the cave. Rhino Rift, between GB/Charterhouse and Longwood/August caves, has, it has now been estimated, a formative date of before 75,000 years

or so, but not much before, while other studies have already put parts of the GB and Longwood systems at 350,000 years or more. This itself is an interesting fact, suggesting that Rhino Rift is a feature owing its existence mainly to recent inter-glaciation periods.





There are implications for the whole of the Cheddar water catchment, and for intermediate passages between swallet and rising such as those we are trying to enter at Bone Hole, etc etc. Applying a similar hydraulic gradient from swallet to rising as currently applies at nearby sites (which is a reasonable hypothesis assuming a similar gradient for adjoining rock strata) "would suggest a resurgence level between 61 and 76m O.D. at Cheddar at a time when the Rhino Rift water level was between 75 and 90m O.D." The article suggests that Long Hole or Gough's Old Cave would fit the extreme range of this postulated resurgence. (Of course, these may have acted as resurgences for other swallets as well.) Speleothem dates suggest that, by the time Rhino Rift had developed an extensive lower series, Long Hole would already have been abandoned as a resurgence.

What is now needed is someone to work out swallet-resurgence relationships for other Mendip cave passages, to present some theories for development of intermediate cave passages and systems at various historical epochs in various localities - and, by extension, where new passages might be worth seeking underground. According to the Proceedings, Rhino Rift is "the first in a series in which we describe the systematic sampling and dating... from several Mendip caves and their interpretation in terms of speleogenesis and geomorphic history of the Mendip region

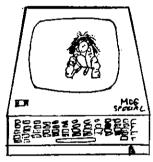


and reconstruction of past environmental conditions"...

Just what the caving Doctor ordered.

The article on CHARTERHOUSE CAVE is important for three reasons. Firstly, it constitutes the definitive description of discovery, and the passage layout, geology, geomorphology and fauna, that the Mendip world has awaited since the cave's discovery in 1982.

Secondly, it contains a map showing accurately the plan relationship between Charterhouse and adjoining GB Cave. Your former Recorder's initial attempt at photo-reduction and superimposition (MCG NEWS 158) proved only slightly wrong, but the crucial way on where Charterhouse Cave meets the Great Swallet boulder choke appears now to be possibly less fraught, the cave being displaced further south from the Swallet choke than we first reckoned... On the other hand, the rock strata dips to the south, and all this is only armchair passage-plotting. Discovering the



real way on is hard graft, being undertaken intensively by the Wessex diggers — their problem of stabilising the choke is many times worse than ours in Bone Hole.

Thirdly, GB Cave was in the 1960s and 70s a classic among sites for cave formation studies, with four theses based partly on GB's features. The 1964 and 1968 reports, authored by Derek Ford, pioneered recent work on cave geomorphology and current theories on continued on page 10 ...

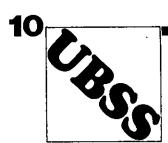
## SARAWAK'84

A Malaysian Airline System Expedition to explore the World's largest caves



THERE WILL BE AN ILLUSTRATED LECTURE ON THE SARAWAK '84 EXPEDITION TO GUNUNG MULU - THE MOST SPECTACULAR CAVING AREA IN THE WORLD - AT THE SCHOOL OF CHEMISTRY, LECTURE THEATRE 1, WOODLAND ROAD, BRISTOL ON MARCH 16th, COMMENCING AT 7.30pm. Entry on the door £1.50.

STEREO-SLIDE PRESENTATION AND SLIDE-SOUND SEQUENCE



cavern development. The value of Charterhouse lies in the ability to check out Ford's theses at an adjoining site, and possibly to suggest modifications to his interpretation of events, at GB Cave and more generally.

As the authors of the Charterhouse Cave article state, "the elevation of individual sites to a 'type example' status in the literature is dangerous, in that it begs the possibility of different interpretations". They acknowledge that there are considerable problems in establishing reliable criteria to support some of their own proposals; nevertheless they feel able to suggest four main variations between Ford's assessment of GB Cave's development, and their interpretation of the combined GB and Charterhouse catchment (which they see as a unified catchment at least during the early stages of local cavern development).

The four differences in outlook are:

- .\* Ford in 1964 suggested a complete network of phreatic passages prior to vadose development. Now it is proposed that only two phreatic routes were present (one extending from GB Double Passage into Charterhouse Cave); however an extensive skeletal network of solutional fissures was also developed;
- \* originally, it was proposed that water table levels in the limestone were initially controlled by the lack of significant cave development, and fell rapidly to a stable base-level controlled elevation after breakthrough of the mature cave system.



Now it is proposed that base-level has always been the major control,

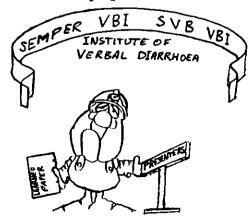
#### ... continued from page 9

but that this is initially mediated by essentially random cut-offs and captures within the passage network, the effects of which decrease systematically with time as solutional development permits the development of an integrated phreas. Water table levels have therefore fallen both slowly and intermittently;

- \* Ford proposed that vadose development occurred in a vertically extensive vadose zone from a complete preexisting phreatic network. Now it is suggested that the vadose zone expanded vertically as the water table fell, over time, with para-phreatic then wholly vadose modification of an initial skeletal network of solution fissures based on joints and dip tubes:
- \* the sequence of captures and trenches developed in GB Cave were thought to be unrelated to the water table; in Charterhouse, it is suggested that a sequence of trenches relating to the declining water table level can be identified.

The value of Ford's pioneering work, in methodology and approach adopted, is not disputed by the authors; however the four differences have possible implications for theories of cavern development elsewhere, though it is not indicated whether their application might be limited to Mendip or have more widespread validity.

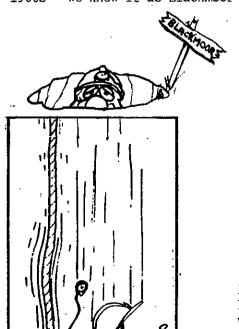
No radiometric chronology is yet available for Charterhouse Cave. But perhaps this will be No.2 in the uranium-dating series: "the ages and possible palaeoclimatic implications of the sedimentary fill sequences present in both Charterhouse and GB Caves are the subject of a further paper, which is at present under preparation".





The third article, which has certainly had the greatest impact of the three among those MCG members who have perused it, is that by Willy Stanton and A G Clarke, on CORNISH MINERS AT CHARTERHOUSE-ON-MENDIP. Thanks to a helpful suggestion by Chris Richards of Weston-super-Mare, who also aided Jon Roberts in his own article on Charterhouse Rakes in the 1982 MCG JOURNAL, Willy Stanton has been able to track down a weekly mining magazine published from 1830 onwards, the MINING JOURNAL. This contains extensive correspondence and articles about the Mendip Hills Mining Company (MHMC), who exploited the area's lead-rich 'refuse' in Blackmoor and Velvet Bottom, using latterday techniques to extract further lead from the valley-floor deposits discarded by earlier centuries of miners and smelters. This activity lasted from 1847 to 1878, the works being abandoned in 1885.

Between 1844 and 1858 the MHMC also attempted, with strenuous efforts before 1848, to mine for supposed deep-level lead-ore veins under the former mine workings at Charterhouse. Cornish mining techniques were used, of sinking deep square shafts and driving 'levels' off the shafts along possible ore bearing lodes. This latter activity was a total failure, but created a number of spectacular shafts, the deepest (known as Stainsby's Shaft) being 59 fathoms/354ft/ 108m deep. We excavated the first 10m or so of this shaft in the 1960s - we know it as Blackmoor Shaft!



Subsequently Stainsby's Shaft was used to dispose of waste from some of the refuse-reprocessing plants in the valley, and a small channel and 'lobby' leading into the shaft were dug by the miners for this purpose - we excavated part of this, too, in the 1960s, and know it as Blackmoor Swallet.

Other vital matters published in this mining article are: the year-by-year conduct of the MHMC; descriptions of the various 'dressing floors' and smelting areas; the 'launders' - water conduits - which supplied water for the lead separation, from Blackmoor reservoir and from the Longwood Valley; implications for possible general locations for natural swallets in Velvet Bottom; historical anecdotes about the lead poisoning of Cheddar's springs; and Victorian mining consultants' comments on their involvement in the mining and smelting locally.

Willy and his colleague have unearthed a truly fascinating history of the Blackmoor/Charterhouse/Velvet Bottom area during the mid-19th century, have supplemented their researches with a 1984 survey of the Rakes and the valley - and are to be heartily congratulated for their 25-page article packed full of facts, anecdotes, maps and illustrations. Willy promises that he has two further articles in preparation, on Charterhouse and Ubley Rakes' lead deposits, and an account of his work at Waterwheel Swallet (Middle Flood Swallet), where a 6m diameter water wheel was excavated by Stanton and Clarke in 1977.

Your reviewer's one regret is that Stanton does not refer readers to another, extensive article on the same district, that by Bob Burgess of the Axbridge Local History & Archaeological Society, in the ALHAS Journal for 1981/2. This contains useful additional information about events locally during the Victorian era, including the equipment of the smelting works. Our 1982 MCG JOURNAL report on Charterhouse Rakes also provides a complementary article about the district, based on caving rather than mining sources, and details present-day open shafts on the Rakes.

For the Charterhouse-on-Mendip article alone, the November 1984 UBSS PROCEEDINGS (Vol.17 No.1) are well worth acquiring. The MCG Library has one copy, but £3 buys you your own, from Bat Products.

### RETURN TO L.A.

#### ... continued from page 1

In each case, the check bearing was within 2° of the survey and I feel that this is good enough correlation to indicate that the original work is satisfactory. Checks on clinometer readings and distance measurements would be meaningless without very accurate reconstruction of selected survey legs.

My own recollections of Mike Rennie's painstaking approach to cave surveying suggest that the likeliest problem would be that of a gross error escaping his detailed attention. Hence, I think, the error in the original true north indication. In 1959 Rennie produced the Goatchurch survey which he acknowledged as 'training' for the Longwood/August task. Despite its high utilisation, I have never heard any criticism of the Goatchurch survey.

At first glance, Longwood/August appears to have been designed by a madman who only regained his marbles at the bottom of Fault Chamber where the system assumes a logical (and easily drawn) series of passages. The overlying intricacies of Longwood Swallet (as it was originally known) and the upper August Hole passages provide a confusing network to express on paper. As a surveying exercise, this area provides numerous problems to tax the accuracy of those involved.

Nevertheless, Rennie managed to survey the upper series of the system with sufficient accuracy to define the length of the then unopened Christmas Crawl which now provides such easy access to Fault Chamber from Great Chamber. The misclosure here was only a few feet, as the fortuitous connection proved. CRG Grade 6 was claimed for the original survey.

Although I had access to Rennie's original on tracing linen, the need to add Renolds Passage Extension dictated that the original scale, 1 cm:10 ft (1:305), be reduced to 1:480 to keep the sheet size to a reasonable dimension. The original was reduced by means of a highly accurate process camera. This was then traced onto a stable plastic drafting film.

Alison and Pete Moody kindly loaned metheir 1:500 BCRA Grade 5 survey of Renolds Passage Extension, which (having got it wrong once) I had enlarged to 1:480 on the same process camera. The original true length elevation I con-

verted to a projected elevation to conform to the existing projection. The azimuth was aligned by correlation of the true north pointers.

Mike Haselden kindly supplied a plan and projected elevation of RHAL Passage, drawn to a scale of 1:120 to CRG Grade 4 with the benefit of radio location. This passage was transferred to the main survey plan by scaling down to 1:480. The elevation was then drawn to match the existing projection.

The two points of radio location provided by SpeleoRHAL related the upper chamber to an identifiable point on the surface and fixed the lower end in relation to the Downstream Series beneath it. This latter radio fix served to confirm the accuracy of the upper and lower series relationship on the main survey plan.

Extensions from the Oxbows, Fossil Passage and Fountain Passage were derived from sketch surveys to BCRA Grade 3 produced over a span of almost twenty years. The tiny inlet passage discovered by Rich Websell and Mark Faulkner a few yards upstream of the Fault Chamber/August streamway junction was surveyed using a Brunton Transit to BCRA Grade 4.

Recent discoveries have been made by Neil Hutchinson and John Miriam (MCG) by climbing in the roof of Longwood Great Chamber, following Jonathan Roberts' discovery in 1983 of 'September Rift' at streamway level. These finds have not yet been surveyed, so providing an excellent excuse for not inflicting further confusion on this overcrowded area of the survey plan. It is not thought [Ed: by TK] that any significant extension will result from these discoveries.

Our exploration continues occasionally at September Rift and in the Oxbows. A new dig is in progress at Fault Chamber, too, managed by BEC members. It would be much appreciated if anyone making a new discovery in the Longwood /August System could let me have some form of survey and description, when work is completed, for inclusion in future revisions.

#### STOP PRESS!!!

DAREN CILAU, already pushed to 4 km ( $2\frac{1}{2}$  miles) length in 1984 by Chelsea SS, has gone another 4 km, following a classic 'bypass' push up one aven, over the top of a boulder choke, and down another aven. The new 'push' had to exclude lots of 'small' side passages.