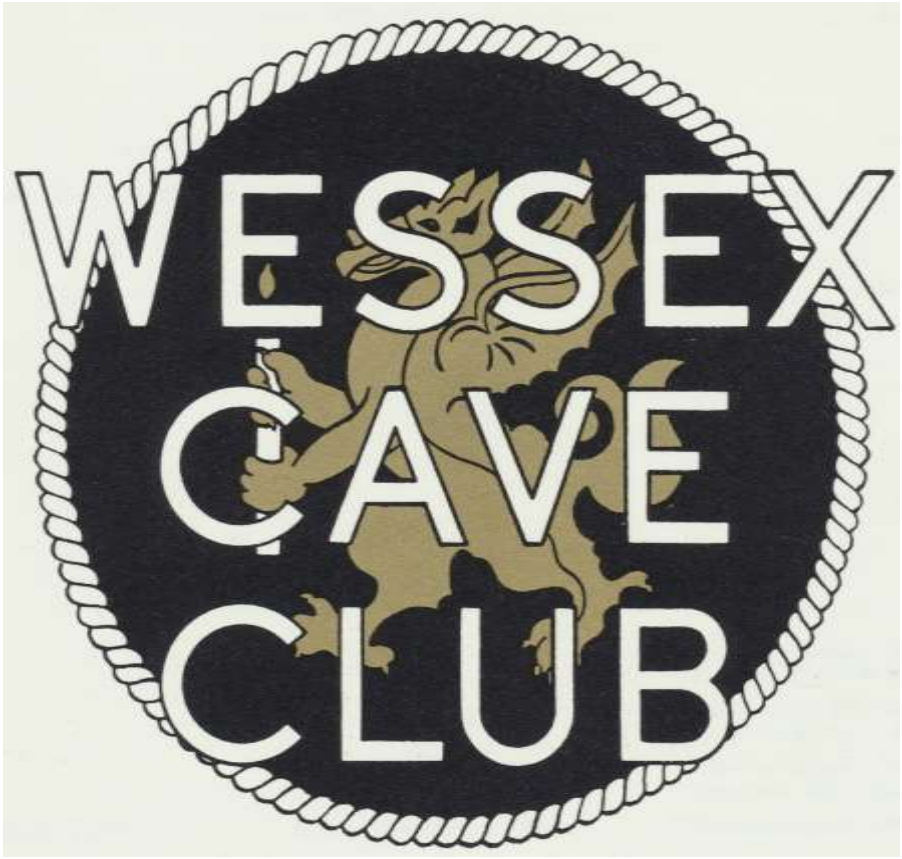
WESSEX
CAVE
CLUB

THE WESSEX CAVE CLUB JOURNAL

VOLUME 22 NUMBER 239 SEPTEMBER 1993

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Assault on ANUS

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club notes

Editorial

Two items to apologise about I'm afraid. Firstly, apologies for the inordinate delay in sending out the last Journal. It actually took over eight weeks for the Journal to get in the post from the time I sent it to the printer. As a result I have decided to move to a different printer, which is why the format for the Journal has changed slightly with this issue. Not only does saddle stitching (as the centre stapled format is known) make a neater job, it is also slightly cheaper than the old format. Overall the change of printers will cost a small amount more money, but will, I hope, be worth it by bringing Club news to the members faster.

Secondly, rumours of the discovery of anti-gravity in Longwood Valley Sink are untrue. Congratulations to all those people who noticed that the first photo in the article in the last issue was upside down. Ho hum!

(corrected in on-line version)

NJW

Luke Devenish

It is with great regret we have to announce that Luke has decided to stand down as president of the Club. The committee understand that this is due to ill health. We are sure that all members of the Club will wish to extend our thanks for his contribution to the Club over the years he has been President and wish him a speedy recovery.

Wessex People

We note with regret the death of William Thomas Edwards. An obituary will appear in the next *Journal.*

Change of address

Les and Wendy Williams, c/o Eastwater Farm, Priddy, Near Wells, Somerset, BA5 3AX,

Terry Shipley, 40 St Margarets Ave., Cottingham, South Humberside, HU16 4NF, 0482 859191

Jeff Tremaine, 27 Strathmore Close, Canterton, Oxon, OX18 1FB, 0993 840344

Dave and Amanda Morrison, Windrush, 42/43 Upper Bristol Road, Clutton, Avon, BS18 4RH, 0761 452437

Tony and Sarah King, Inglewood, Westcott Road, Dorking, Surrey, 0306 888005

J. M. Rawlings, The Rookery, Upton Cheyeny, Bitton, Bristol, BS15 5UL, 0272 476054

New Members

A warm welcome to:

Steve Ellis, 26 Blenheim St., Bristol, BS5 0NS, 0272 510663

Graham Prole, 13 North Ash, Hawthorn Close, Horsham, W. Sussex, 0403 269379

Robert Dodd, 32 Nuffield Close, Didcot, Oxon, OX11 8TW, 0235 817499

Richard Hooper, 15 Old Tye Avenue, Biggin Hill, Westerham, Kent, TN16 3LY, 0959 572841

Robin Brown, 6 Hillsboro, Wollavington, Bridgwater, Somerset, TA7 8EZ, 0278 683862

Congratulations

to Clare Jarvis and Douglas Boomer who were married on 11 September.

Committee notes

Mike York has requested that all Club **library books** be returned by the AGM. Some have been out for over two years!

Following correspondence with Somerset County Fire Brigade, it transpires that Upper Pitts does not require a **fire certificate,** so long as "accommodation is only provided for members and their bona fide guests,... and providing that the premises are not operated for commercial gain...." This eases the urgency to spend a considerable sum on fire precautions, but there is still work which has to be done to make the place fully acceptable. Foremost amongst these is the replacement of the foam mattresses in the dormitories so any member who can supply the name of a source of fire proof mattresses is asked to contact Nick Williams. The weekend of **4 December** has been designated as a **hut working weekend,** with fitting of the new fire escape a principle objective for the weekend.

Work on the **kitchen** has proceeded well over the summer months. Stainless steel cladding is now in place on three of the four walls and stainless work tops have been placed around two walls along with the new ovens and hobs. Work remaining to do is the replacement of the ceiling and sink areas but the kitchen is now operational again in time for the autumn rush.

Hut fees have been raised, effective from the beginning of the Club's financial year (1 August). There has been no rise in the fees for members which remain at £1.50 per night but the new rate for guests is £3.00.

The Wessex **Annual Dinner** will be held after the AGM on 16 October. The dinner will be held at the Coxley Vineyard, near Wells (same venue as last year) and coach transport is laid on from Upper Pitts. Festivities commence at 7.30pm, and the menu choices this year are coq au vin, roast beef, grilled trout and a vegetarian option. Those who have not already received a booking form should contact Marion Batten on 0422 321535.

caving notes

Members of the BEC, in association with the local police, the Mendip District Wardens and the Charterhouse Outdoor Centre, have decided that action is required to try to halt the current spate of **car break-ins** on Mendip. This has recently reached epidemic proportions — there were eight cars broken into in the Charterhouse area over the first weekend in September. A meeting is being held at the Hunter's Lodge on Friday 1 October at 8.00pm to which any and all with ideas and offers of assistance are welcome. If you can't make it but would still like to help please contact Nick Williams (number at the front of the ***Journal***) who will put you in touch with the BEC co-ordinators. In the meantime, volunteers are required to spend time watching cars in the GB/Longwood area: anyone willing to spend a few hours on this at a weekend should call in to the Belfrey or turn up at the Charterhouse Centre where they will be given a radio and guidelines on what to do if they see anyone acting suspiciously.

The Wessex team won the **Wessex Challenge** held in July. This is somewhat fortuitous since it was the tenth year the Challenge has been held and there has been talk of the need for a change now for some time so it provides the Club with the opportunity to round the challenge off neatly and come up with a new idea for next year. Next year's event will be held as part of the **British Cave Rescue Council Conference** which is to be held in Priddy on the second weekend in July.

Following a request from the farmer, Mr. Brown, the MCG have re-negotiated access arrangements for **Pinetree Pot.** The lock on the cave has been changed and keys are now only available from the MCG, either by calling a Nordrach Cottage or by post from 10 Enstone Road, Charlbury, Oxon, OX7 3QR. A £15.00 deposit is required in either case. Mr Brown has requested that trips only be made during the day at weekends (ie no weekday or evening trips) and that access to the cave is only from the field gate just west of Warren Cottage on the B3134. Parking is available in the layby opposite the gate or at Nordrach cottage. Cavers are requested NOT to approach the cave from the minor lane which leads to Warren Farm.

The Royal Forest of Dean Caving Club have recently issued an update on the access arrangements for Slaughter Stream Cave. Access is currently being organised by Andy Clarke (0600 716970) and is only available at weekends. The Wessex has had two bookings in the cave this year already, and further bookings will be made for 1994 or on request - please contact Andy Summerskill (0252 875453).

Brecon Beacons National Park are proposing to introduce a charge for car parking at **Porth-Yr-Ogof.** The money will be used to pay for a car park attendant in the hope that this will help to control car theft and break-ins in the area.

There is a report of bad air in **Cwm Rheidol Mine.** Further details are available by contacting the Shropshire Cave and Mine Club.

The ladder at the end of the bypass to the second pitch in **P8 (Jackpot)** is now in a very bad condition. Hopefully it will shortly be replaced. Also in Derbyshire six new DMM hangars have been placed on the traverses over Base Camp Chamber and the Bad Step traverse to Geology Pot in **Giants Hole,** and work on **Owl Hole** has now finished: the site has been landscaped and boulders positioned to prevent cars driving to the site and using it as a dump.

The recent **Caver's Fair,** held in the Hope Valley, built on last year's success. A better level of attendance and stricter controls on cost meant that the event did not suffer the horrendous financial loss of last year. Next year's event seems likely to be held in South Wales but will be at a different time of year so as not to clash with the Rescue Conference.

From the North comes news of concern about the rapid rate of deterioration of the decorated parts of **Hagg Gill Pot,** one of the best decorated caves in the dales when it was discovered only a few years ago. CNCC are advising that the cave is particularly sensitive to damage by inexperienced cavers and are thus trying to discourage visits to the cave by novices.

Finally, following advice from the Club's resident Portland expert, the Wessex have officially adopted several **Portland digs.** The sites affected are Allotment, Sandy Hole, Engineers and Clay Ore digs, and Nigel Graham has requested that the Club officially recognise them as this might help to ease potential access problems. At this stage there is no financial commitment from the Club in these adoptions.

The first survey of GB Cave

by Trevor Shaw

Two quite separate surveys of GB Cave have been made since its discovery on 19 November 1939. In addition to the 'current' one made in 1949 and 1950 and updated since, a previous one had been progressed very shortly after the cave was first explored.

The discovery and early exploration were described by Goddard (1944) and Barker (1948) - the 'G' and the 'B' of 'GB'. All later accounts were hindered by the apparent loss of the UBSS 'Camp Log' (i.e. the Hut Log) of the period, in which the day-to-day activities of exploration had been recorded. This Log was found, in private hands, in the 1980's, and some extracts from it concerning GB Cave were quoted by Shaw (1989). None of these accounts, however, gives much attention to the first survey, of 1940-1943.

A note written in the Log as early as 25 November 1939 included 'survey' among various items of 'work to be done', and it was started early in 1940. By 10 March the upper passages had been surveyed in part, and on 30 March aneroid readings showed the depth from the entrance to be 450 ft (137 m). This was later revised to 480 ft (146 m) (Goddard, 1944, p. 110).

The survey data obtained gave rise to two published versions. The first was attributed to G.A.Walton and appeared in *The Illustrated London News* for 9 August 1941 (Goddard & Pearce, 1941), where it was described as a 'sketch-plan'. A later version, in the UBSS *Proceedings* (Goddard, 1944), is dated 1940-43 and differs very greatly from the Walton version, besides containing additions of discoveries made as late as 1943, but it does not include Bertie's Pot which was discovered on 2 August; Walton's plan must indeed have been only a sketch plan. The accompanying article was certainly written in a hurry, on 15 June 1941, according to the Log.

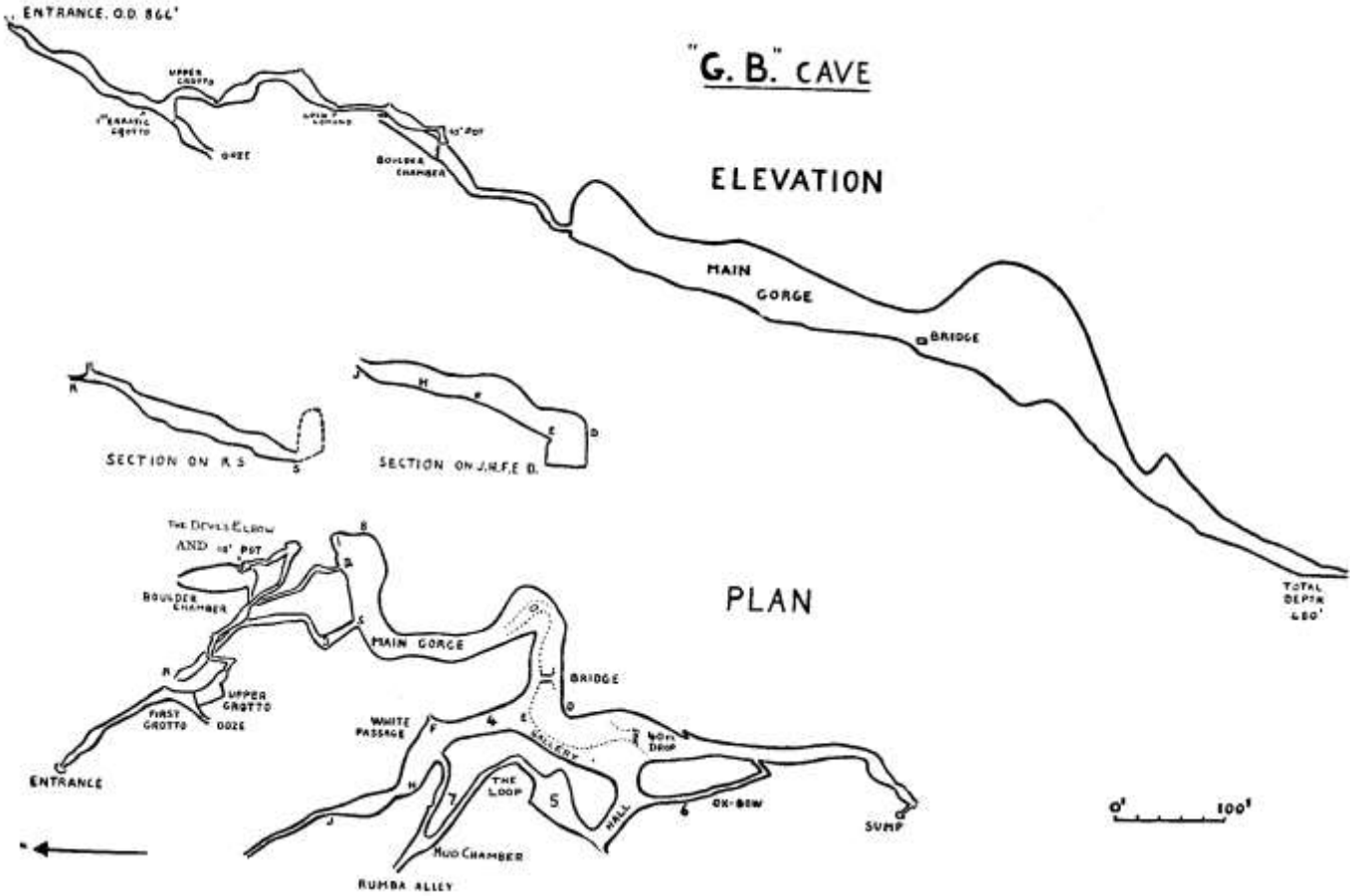
The version published in 1944, however inaccurate it is now known to have been, was at least plotted from the survey data. Rodney Pearce, then the Society's secretary (pers. comm.. 22 Jan 1989) writes: "I remember getting the largest possible sheet of parchment from George's bookshop, at the top of Park St., which overlapped the only table I had in my digs, & Francis [Goddard] & I converting the survey figures into the Plan". However he does comment that it "was pretty primitive, & by present day standards more gradeable as a 'sketch plan', but in the haste & circumstances in which it was completed, this should be excused." The 'circumstances' included the bombing of Bristol and the extra work devolving on medical students.

Although brief entries in the Log between 1940 and 1943 enable progress with the survey to be followed, no details of the surveying are given. However, Pearce (pers. comm.) recalls "the episode of carrying down a balloon charged with hydrogen, in a cake tin (very quickly, before it leaked) & attached to a length of button thread, to measure the height of the gorge at its maximum, - below the 'drop' to the roof. This proved to be circa 120 ft., + or -?, since it had partially deflated. We thought it unwise to take down a cylinder of Hydrogen to recharge it, because, in those days we were using acetylene lamps & candles." This measured height of 120 ft is shown in the 1944 published survey, so there has not been confusion with the 1950 balloon episode (at which Pearce was not present).

Comparison of the 1940s plans with the definitive survey by Crickmay and Bendall (1951) shows that neither of the early versions is wholly correct. Major discrepancies occur in Walton's plan below the Gorge and in White Passage, and in the 1944 plan The Loop and Rhumba Alley are quite wrong.

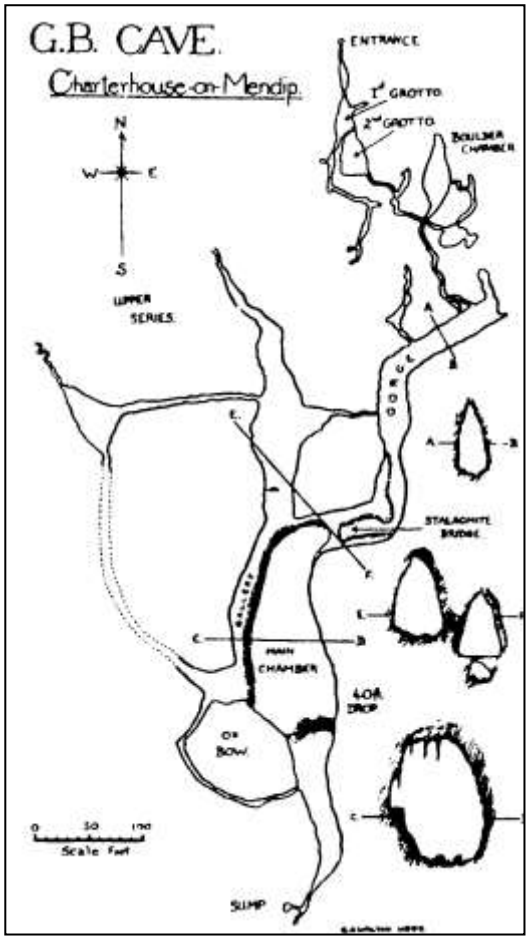
The survey published by Crickmay and Bendall in 1951, and reissued with additions by Savage (1969), was made during 1949 and 1950. Progress of the survey was recorded in the Log. Some preliminary work had been done in the cave on November 13 and 20, 1948, and surface surveying near the entrance was carried out in January, April and June 1949. The main survey inside the cave started in June 1949 and continued throughout the year. "This completes skeleton of plan - detail & side passages can be filled in later" wrote Bendall

The survey published by the UBSS in 1943



The earlier survey published in the Illustrated London News in 1941

on 2 October. 'Later' included Christmas Day, 1949. The surveying was completed at the weekend of April 8 to 9, 1959, when a 3 ft diameter hydrogen balloon was inflated and used to measure the height of the Gorge at successive points (Blackwell, 1951). Work on the 8th ended when the balloon burst against a stalactite at the highest point in the roof (75 ft). Another balloon was used on the following day to complete the measurements, and a photograph of the operation was taken (Crickmay & Bendall, 1951, after p.174).



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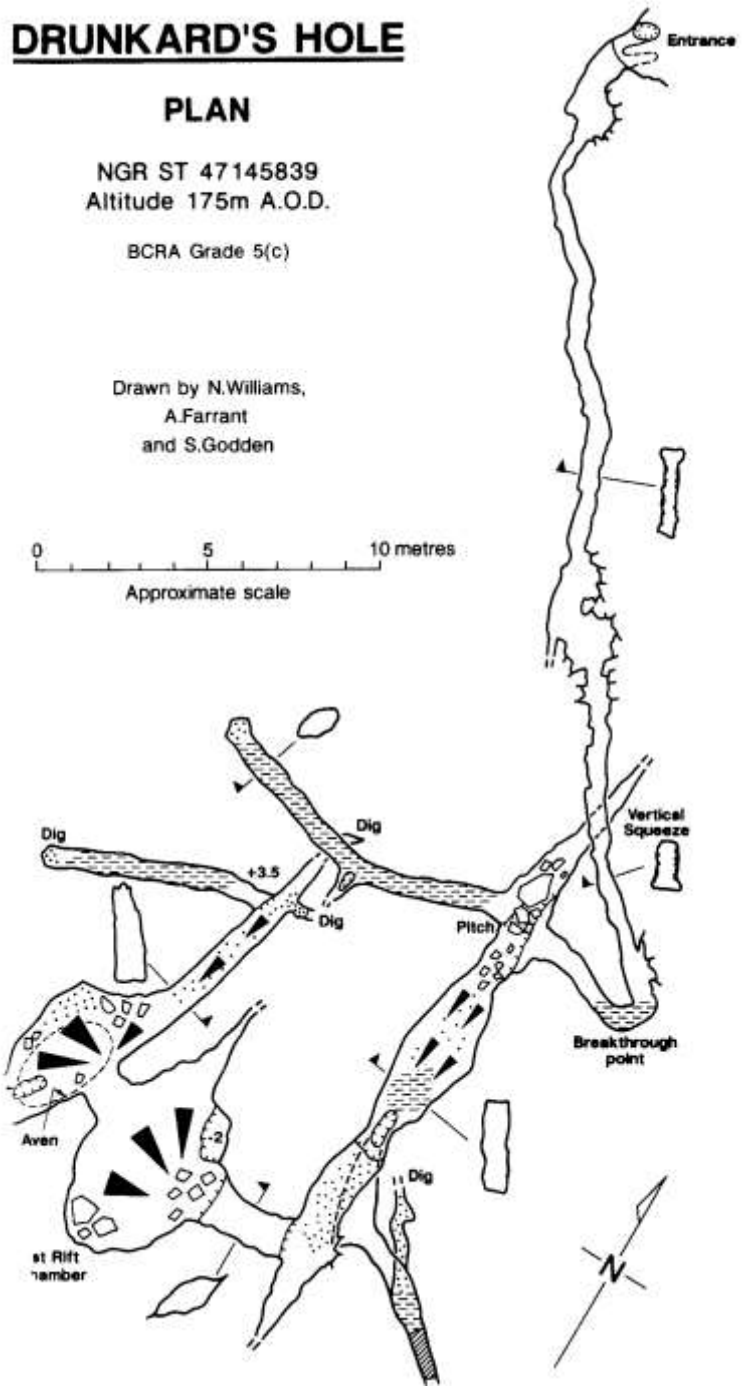
Drunkard's Hole

a description

Discovery of the cave is attributed to the UBSS. Barrington and Stanton (1977) state that the cave was dug open, by the UBSS, in 1923, to a length of 15 m and 20 m depth. The Society's own records prior to 1926 are virtually nonexistent and do not mention this. The cave was extended a further 5 m to a tight rift by the Axbridge Caving Group in 1971 (Richards, 1971), and more recently members of the Wessex Cave Club made a major breakthrough in March 1989 which more than doubled the length of the previously known cave (Williams, 1989) (Fig. 1).

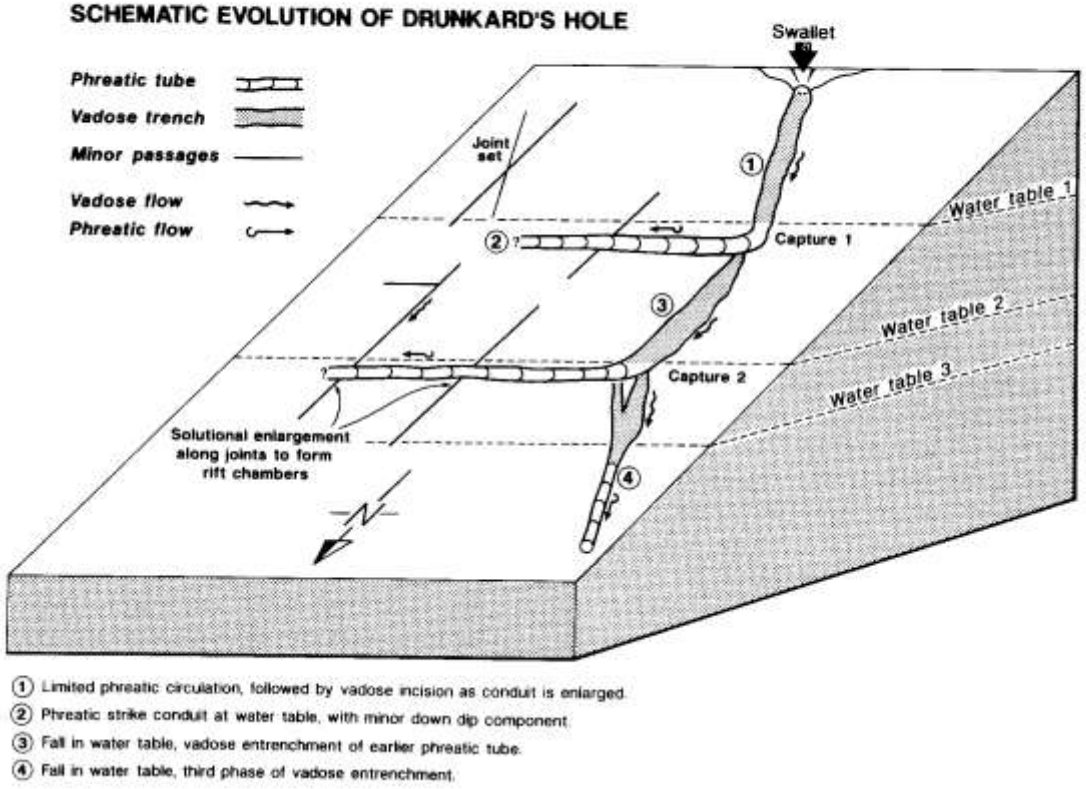


The Entrance Passage is inclined at the angle of dip (50°) and contains numerous shelves and rock projections which make progress awkward. The overall impression is of a tight rift along which it is difficult to travel, although in fact, nowhere is it particularly tight and there are several points at which cavers travelling in opposite directions can pass one another.

The crux is reached after some 20 m and comprises a vertical squeeze about 3 m long. Below this the passage becomes low and steeply inclined for about 2.5 m before reaching the point of the 1989 breakthrough, where it takes a sharp turn to the right into a horizontal passage intersecting the top of two rifts. The first of these leads to the Wessex Cave Club extensions. The horizontal passage closes down after a few metres in a sand and boulder fill.

A 10 m ladder hung from the bolts provided at the top of the first rift reaches a point half way down a wall of jammed boulders. Here, parts of the 'floor' of the passage above are only jammed boulders and gravel and although there is apparently a free climbable way down, this is very loose and unstable. At the bottom of the ladder the wall has been stabilised by cementing and tackle is not required for further descent.

by Nick Williams
and Andy Farrant



Digging below the wall has resulted in a further 10m of downward progress, although at almost every stage loose boulders have had to be stabilised with cement, and the whole dig collapsed at least once during operations. The lowest point in the cave is a short crawl with a sandy floor some 48 m below the entrance.

At the bottom of the ladder a traverse over the top of the dig for about 10 m reveals a window in the right hand wall. There are bolts here for a climb down into a second chamber which is actually a parallel rift. On the opposite side of the chamber is a second window into a third rift. This was originally filled with sand and small boulders but several cubic metres of sediment were flushed into the rift during the wet winter of 1990. This revealed an aven over 10 m high and had the effect of raising the floor level some 4 m. It also blocked a small passage which originally led to the bottom of the second rift accessible from above the 10 m pitch. Further digging operations since the collapse have revealed a number of choked passages which may eventually reach a fourth parallel rift.

The cave takes no regular stream, and has never been dye traced although Bath Swallet and Read's Cavern have been traced to Langford rising (both) and Rickford rising (Read's) (Drew *etal* 1968, Tratman, 1963). Despite this lack of streamway, the cave can become quite wet after prolonged rain, demonstrating that there is significant percolation input. As there are several areas where large quantities of small boulders and gravel are suspended in the roof, rain probably also adds significantly to the risk of collapse. The entrance area has a noticeable draught.

Drunkard's Hole is an abandoned swallet cave which was formed by a stream draining from the northern side of the Blackdown pericline. It is located on the boundary of the Lower Limestone Shales and the Blackrock Limestone.

The cave shows both phreatic and vadose features, and the cave is developed along two sets of joints orientated at 330°N and 015°N. The first section of the cave down to the breakthrough point is a narrow vadose trench 0.5 m wide and up to 10 m deep, with a small phreatic tube at roof level, descending down dip at c.50°. At the breakthrough point, at 150 m AOD, the passage turns east along strike and becomes a phreatic tube 0.75 m in diameter. This soon becomes blocked with sand and silt. A vadose trench has

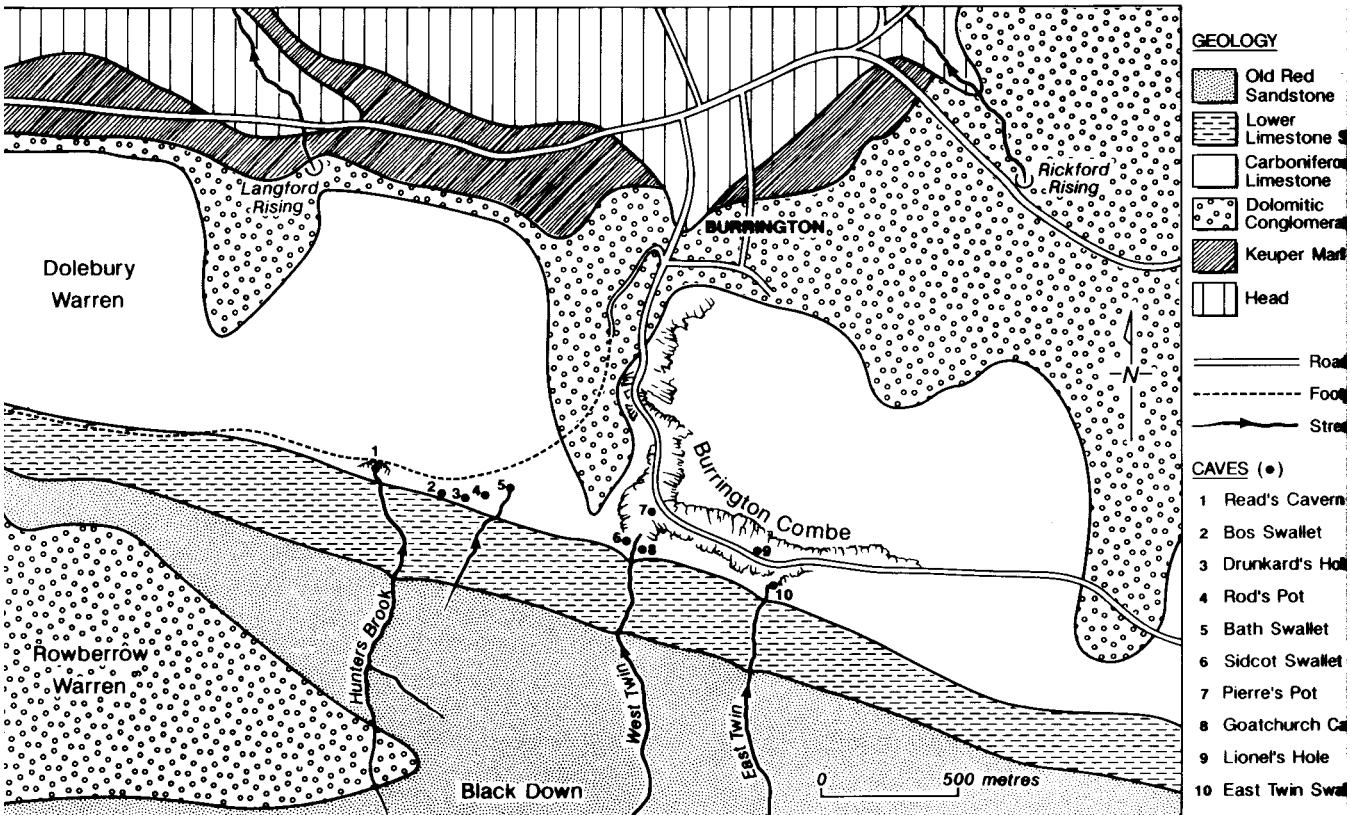
been incised into the floor of the phreatic tube and follows a prominent joint down dip, forming the 10 m pitch. At 141 m AOD the passage again becomes phreatic and turns east along strike (Fig. 3b). Water flowing down two parallel joints also fed into this phreatic tube, forming the two rift chambers seen in the extension where they met. It is possible that a continuation of this phreatic tube exists behind the sediment infill in the second rift chamber, heading towards Rod's Pot. Several other small phreatic tubes also lead off the rift chambers towards Rod's Pot.

A third vadose trench is incised into the floor of the second, following the same joint as the entrance rift. At 127 m AOD the vadose trench intersects a phreatic tube, which follows the joint to the north (Fig. 3c). The current downstream end is a tube c. 0.7 m in diameter, choked with sand and gravel. The upstream section of this phreatic tube is also fed by another vadose trench which is infilled with a coarse stream-lain Old Red Sandstone fill. At this point, some superb chert nodules can be seen projecting from the wall. The cave was at some time infilled with a coarse fluvial sandstone fill, which has since been partially washed out. There has been relatively little post-glacial modification of the cave, due to the diversion of the formative stream, with only some minor vadose fluting having occurred on the 10 m pitch.

It is suggested that there were three phases of watertable followed by base level rejuvenation and a subsequent fall in the local watertable, causing renewed vadose incision. The first occurred at 150 m AOD, where the cave first becomes phreatic (followed by vadose incision into the floor of the phreatic tube), the second at 141 m AOD where the passage again turns phreatic and follows the strike, and the third at 127 m AOD at the phreatic tube at the bottom of the cave, which is currently blocked.

A similar sequence of development can be seen in Rod's Pot 40 m to the north east, these two caves are almost certainly part of the same system and are probably linked, with Drunkard's Hole acting as a tributary to Rod's Pot. Three phreatic levels can be identified in Rod's Pot which correspond to those identified in Drunkard's Hole. The first occurs at the top of the two blind 12 m pitches, at about 150 m AOD, the second in the Main Chamber, 143 m AOD and the third in the lowest part of the cave at 127 m AOD. This proposed sequence of a progressive vertical extension of the vadose zone in response to a steadily falling water table is similar to that suggested by Smart (Smart *etal* 1984) for Charterhouse Cave.

Many of the phreatic tubes in Drunkard's Hole are infilled with a coarse fluvial sandy gravel fill, derived from the Old Red Sandstone to the south. The dominance of the sandstone can clearly be shown by clast analysis of a sample from the bottom



Adventure in Wales

by Shelley Willson

This article should be read in a Canadian accent

Lancaster University Speleological Society members are poverty-stricken as a rule, so when the opportunity arose to hitch a ride across the country to Mendip with NJW, I didn't think twice. "Mendip!" I said. "Sure, I'll come. Where is it?"

"Near Bristol, Shelley," Nick replied.

"Smashing! We're going to Wales!" (in self-defense, it must be said that I'm from the hinterlands of the empire, Canada to be exact)

Having quickly found a fellow caver, Cindy, to come share in the adventure, we were soon *en route***,** braving Mach 4 forces as we hurtled down the M6 in Nick's little white ice-cream-mobile, a 60 kg electricity generator stashed in the back ready to put us out of our misery should anything go wrong with the traffic up ahead. Yet another thing not to write home about!

In no time at all, we found ourselves before Upper Pitts hut. After alighting from the van and kissing the ground, Cindy and I prepared to spend a relaxing evening. First stop was the Hunter's Lodge Inn, where we noted with wry amusement that Nick's entering the pub accompanied by two young ladies seemed to boost his club image to an extent that no amount of caving prowess could have done. The classic quote of the evening was addressed to myself, by a speaker whom I will leave mercifully anonymous: "So, are you a caver, or did Nick just pick you up on a street somewhere?" !?! Of course, the evening could not have been complete without trying our hand at an assortment of rituals including the squish-through-the-ladder-upside-down trick and the scrape-the-flesh-off-your-Canadian-hips-in-order-to-outdo-the-English contest, using the squeeze-machine (you'll be pleased to know that I conceded defeat to the locals, however not until after achieving a personal record of 6¾").

We were up bright and early the next morning, though, and in fact even made it to Swildon's by about lunchtime. NJW and Cindy took one passage, whereas I, ever the masochist, opted to cave with Mark and Les (aka. hoo-HOO!) out to the digging at Pirate Chamber. Other than a couple of damp spots (where I was treated to my first-ever view of persons sucking out sump-water and clay using a hose system), the going was pretty easy. Mostly horizontal caving was a bit of a welcome novelty for me (having done virtually all, ie. seven months' worth, of my previous caving in the Dales). I don't remember anything much of the evening, so it must have been fairly uneventful (or perhaps it was bizarre, but by then I had adapted).

I was looking forward to the next day because we were planning on some digging at Clay Hole (imaginative name, isn't it? I thought so too), and I had never had a chance to play with explosives. And sure enough my dreams came true after using only a few ounces of powder (no, not drugs, SLB explosives). With a roar we cracked a couple of biggish rocks and were down in a flash to further our gains.

The hours at Clay Holes passed all too quickly (oh dear I'm getting nostalgic). The three of us laboured blissfully, knee-deep in sheep shite and clay soup, crowbars and buckets in hand, the roof creaking ominously overhead and the spectators who had gathered to watch gaping incredulously. We made perhaps 3 or 4 feet of progress. The wall to the right sounds hollow and I'd be interested to come back and have another go. This was Cindy's and my first dig ever, and I must say it was a transforming experience, at least in the sense that we came out looking like creatures from the Black Lagoon (slap, slap on the wrist from the manicurist!). We noticed the motels rushing to cover up their vacancy signs and the laundrettes hastily closing down shop as we drove back to the hut. However, a few hours with the pressure water hose soon put matters right, clothing-wise.

Now writing in exile from the sleepy little town of Lancaster, all I can add is thank you Wessex Caving Club. It was good to meet some of you, you have a much warmer hut than our own Clapdale Farmhouse, and I hope to see you again.

Longwood Valley Sink [see correction in next Journal]

In the last Journal Richard Witcombe described the activities of diggers at the sink, including the use of some novel pumping technology. Here we reproduce the log of the digging trips.

Sunday 1 July 1990 SM-K, RW

Return visit to Viaduct Sink to investigate the digging prospects in Downside Aven.

The gate appears locked but in fact can be quite easily moved sideways, and apart from a few twigs and small branches at the bottom of the entrance shaft, the cave was unchanged from the last time it was dug.

Grimpen Mire contained up to a foot of cowshy mud, and RW started to infill this with rocks while SM-K investigated Downside Aven.

This runs parallel with the valley for about 20', and since there is a dangerously unsafe inlet ruckle above the upstream end, it may be not so much an aven but a collapsed section of a high fossil rift passage with a downstream continuation beyond the present boulder and mud choke in the roof. The rubble cone contains some massive pieces of ancient stal which add weight to this theory. The roof in some places is a very loose pack of rocks but at the far end, large, well wedged boulders offer a reasonable safe digging site. SM-K moved back some of the collapse debris and pronounced it to be "not without interest".

Bang had been taken underground, but it was decided to leave all large boulders alone until the true state of the roof could be determined.

Sunday 15 July 1990 SM-K, RW

Even with a rock infill the Grimpen Mire remains a squalid crawl.

Serious digging commenced about 10' back from the far end of the rift which is about 5' below the point where the rubble slope reaches the roof. The work entails standing on a teetering pile of broken rock and stal about 12' above the entry point from the Grimpen Mire and pulling out the rocks ahead and dropping them below. The rift at this point is just over 2' wide. The rocks pile up at the entrance to the Grimpen Mire and the continuation bedding plane on the far side of the aven, and careful stacking will be required to exploit the very limited dumping space.

The crumbling walls at the top of the aven prevent a close look at what appears to be a large inlet passage entering at roof level on the left hand side looking downstream. The visible section is about 3' square with a small trench in the floor.

Thursday 19 July 1990 SM-K

Pushed forward in Downside Aven, encountering a more compacted mud and rock fill.

Sunday 22 July 1990 SM-K

Further digging in Downside Aven revealed a large jammed block in the "floor". If this cannot be moved it may have to be banged. Not an ideal situation given the state of the roof.

Sunday 29 July 1990 RW, SM-K

More rocks were lobbed into the Grimpen Mire, changing it from a muddy wallow into a slimy, stony flat out crawl. The high dig continued over the large block and reached the very hard packed fill of the terminal choke. Another large and as yet unmoveable rock was uncovered at head height. It was decided to deepen the dig to see if it is possible either to pass under these blocks or to undermine and lower them in a controlled fashion. The day's spoil was carefully dropped down the rift and a dry stone retaining wall was started to keep the Bridge Junction and Grimpen Mire exits clear.

Monday 30 July 1990 SM-K

Dug around the jammed block. The surrounding fill comprises very compacted brown mud, small stones, including ORS cobbles, and broken stal.

Sunday 5 August 1990 RW, SM-K

Spotted a green woodpecker on the walk over to the dig. Underground, the jammed block, about 2' long and 1' thick, was dug free and moved back from the digging face. More walling was built at the foot of the aven, and the fill from above was dropped behind it.

By the end of the session, the prospects at the end of the rift were not looking too hopeful. The passage had narrowed to less than 1' and several large rocks were visible in the hard packed fill. Further thought was given to the nature of the aven. It is possible that it was largely formed by water plunging from the "inlet passage" above, in which case an exit at the bottom seems likely. On the assumption that the Bridge Junction passage is too immature to have carried away this water, another way out should exist along the down dip, right hand side of the aven. There is a hint of a choked bedding plane on the left hand side of the entrance to the Bridge Junction passage, and it was decided to probe again at the bottom of the aven.

A trial excavation in the rubble slope above the retaining wall did indeed reveal some development under the right hand wall - whether an alcove or a passage, it is too early to say. Not surprisingly, this excavation started to

undermine the precariously perched rubble, and several small collapses occurred before discretion called a halt to the work. Further effort will be concentrated here, but careful thought will have to be given to stabilising the rock pile and disposing of spoil.

A short rope was left underground, but curiously the drum of bang cable dumped on 1 July had vanished.

Sunday 12 August 1990 RW, SM-K

Spent a couple of hours stabilising the rubble slope. The initial move consisted of gingerly tying a rope to a projecting rock, retreating into the Grimpen Mire and giving a sharp tug, thereby precipitating a "controlled" collapse. A second attempt to do this was less successful, and so further minor collapses were started by hand whilst straddling the rift. Rocks were stacked in every nook and cranny at the foot of the slope, and a large number were thrown or taken up to the now abandoned high level dig. At the end of the session, the slope was a reasonably stable 45 degree incline.

Almost all the way up this 45 degree line there appeared to be undercutting of the right wall, suggesting perhaps some chamber development on this side. The area of last week's probe, about 10' above the Grimpen Mire level, was looked at again and an irregular roof was followed inwards for about 3'. Still more of the slope will have to be removed before this site can be properly examined.

Sunday 19 August 1990 SM-K

Gingerly removed three loose blocks from the right hand wall of the rift and used them to form the base of a retaining wall just beyond the area to be examined. Started to clear out the rift fill and dump it behind the wall.

Sunday 26 August 1990 SM-K, RW

Spotted a buzzard wheeling around the old Thrupe dig.

Continued clearing out the rift fill using an old bucket found in Shale End. The fill, as much mud as rock, was dumped in the abandoned top dig.

Attempted to look into the high left hand inlet. It quickly funnels in but there may be a way on.

Tuesday 28 August 1990 SM-K

Took down a better bucket. To increase dumping space in the rift, sorted out the medium sized rocks from the top dump and took them out through the Mire.

Sunday 2 September 1990 SM-K, RW

Spotted the green woodpecker again on the railway track.

Cleared some of the rocks stacked at the bottom of Downside Aven out through the Mire, where they were dumped in a small inlet. A few more were thrown into the Gas Chamber bedding plane and some built into a small retaining wall.

Digging then continued in the area of the undercut with mud and small rocks being dumped in the old top dig. As feared, the main retaining wall soon became undermined to the point of defying gravity. A quick scrabble under the right wall revealed disappointingly that the hoped for passage was only a 6" wide rift with some minor bedding collapse around it.

The best prospect now appears to be the suspected bedding plane development at the base of the aven, to the left of the way on to Bridge Junction. To probe this area will require removing a lot of spoil including the first retaining wall started on 29 July.

Before leaving the dig, the area of the undercut was backfilled and the undermined wall made secure.

Sunday 9 September 1990 SM-K, RW

Continued excavating downwards from the base of the main retaining wall, dumping most of the spoil at the top of the rift. There is an alcove on the right hand side created by collapsed bedding along a line of weakness. Digging eventually produced a visual link with the way on to Bridge Junction, but much more fill, mainly rocks and broken stal, will have to be removed to establish whether there is a viable way on under the wall.

Sunday 16 September 1990 SM-K

Continued digging at the bottom of the aven. Larger rocks were taken back through the Grimpen Mire and the rest of the spoil was dumped at the top of the rift.

The bang cable "reported missing" on 5 August was found under the rubble!

Friday 21 September 1990 SM-K

Further work at the base of the aven. The excavation beneath the right hand wall has exposed a left hand rock face which may represent one side of a passage.

Sunday 30 September 1990 SM-K

Torrential rain on Saturday and Sunday morning had created very wet conditions underground with only a foot of airspace in the Grimpen Mire and heavy drip in Downside Aven, some of it coming from the big inlet.

The dig under the right hand wall of the aven revealed nothing more than a 5" wide rift carrying on down dip. The main Grimpen Mire exit must have been the passage down to Bridge Junction. Was this also the exit for the Downside Aven water?

A trial dig was started in the floor of the aven itself and small spaces among the rocks soon appeared, followed by the sound of stones rattling down five to ten feet. The rift, about 15" wide at this point, clearly continues down below the level of the Grimpen Mire/Bridge Junction crossover, and seems a very good lead to follow.

Saturday 6 October 1990 SM-K

Drier underground than last week despite fairly heavy rain.

Continued excavating the floor of Downside Aven, unavoidably undermining the main retaining wall in the process. Beneath the teetering mass, which is partly resting on a buttress of rock in the middle of the rift, a largely open slot was uncovered, only 12" to 15" wide but descending at least 15' to a floor or choke. There may be some development on the right hand side but the area is too threatened for a very close look. Any "safe" access to the open rift will have to be gained nearer to the Grimpen Mire where a large block sits in the slot.

Sunday 7 October 1990 SM-K, RW

Took a washing up bowl and a length of light rope underground for hauling rocks and spoil through the Mire.

After an initial session stacking rocks in the Gas Chamber bedding plane, the washing up bowl with a line at either end was brought into use clearing rocks back from the junction of the Mire with the rift. Before leaving it was decided that work could not safely continue under the unsupported retaining wall, and the open slot was bridged over from the jammed block and a quick buttress of rocks built up to support the wall. The "way on" is no longer visible.

Friday 12 October 1990 SM-K

Took down a new washing up bowl and a small amount of bang.

Continued clearing the area at the mouth of the Mire in the hope of exposing the continuation of the slot. The floor proved surprisingly solid with no hint of any rift development.

Placed a very small charge - about a third of a slab - among the big blocks at the mouth of the Mire and fired from the chamber below the entrance passage.

Sunday 14 October 1990 SM-K, RW

The bang had demolished the largest boulder and split others.

After another stacking session in the Gas Chamber, the bang debris was removed from the mouth of the Mire and more mud was cleared from the floor. Apart from a few undulations, there was little evidence of any downwards development.

It seems that the slot or pot lies directly under the roof inlet and does not run, at any rate in any significant form, along the whole length of the rift. Since the vertical access to the pot is now buried under the boulder slope, and there is neither the dumping space nor the manpower to contemplate removing this pile, it was decided to bang a way downwards from the mouth of the Mire and then push horizontally into the open slot.

To prepare for the future bang shock waves, the bottom of the boulder pile was reinforced with several large blocks.

Sunday 23 December 1990 SM-K

A three slab charge was laid in the rift floor and fired from the entrance passage.

Thursday 27 December 1990 SM-K

The boulder pile had survived the blast. The bang debris was stacked temporarily to one side and the rift floor was probed until a small connection with the open slot was made. This was sufficient to drain the water from the Grimpen Mire.

Friday 28 December 1990 SM-K

Further digging in the rift floor, dumping material temporarily all around the bottom of the aven.

Saturday 5 January 1991 SM-K

Persons unknown, possibly motor cycle scramblers, had set up various markers in the valley floor and diverted a large part of the stream down the entrance shaft.

Underground, the recent heavy rain had created very wet conditions. Apart from the usual winter shower in Downside Aven, heavy drip from Red Aven was running through the Grimpen Mire and beginning to pond up in the dig.

Further digging revealed something of the form of the rift at the bottom of Downside Aven. Beyond the threshold to the Grimpen Mire, the banged and excavated rift is about 18" wide, although the floor of the Mire itself has not yet revealed a side wall. On the opposite side there is a rift wall split only by a central slot a few inches wide, and the Bridge Junction passage seems therefore to be largely a hanging passage. The downwards development may owe as much to the ancient Grimpen Mire water as to the water from Downside Aven itself.

Recovered an entrenching tool head from Gothic Passage.

Saturday 2 February 1991 SM-K, RW

Heavy drip underground following a snow thaw.

Continued clearing out the rift, stockpiling the spoil - mainly mud and a few small cobbles - just below Red Aven. At the end of the session, the dig floor was below the level of the tiny slot connecting with the drop and was consequently under water. The slot is very difficult to enlarge or deepen as it is directly under the boulder pile, and the right hand buttress, which may be solid rock, cannot be attacked without considerable risk of collapse. Rocks were judiciously re-arranged to allow a little more access to the slot, and enlargement by chiselling rather than bang may have to be tried.

Sunday 24 February 1991 SM-K

Transported the last session's spoil through to Gothic Passage.

Saturday 16 March 1991 SM-K, RW

Very wet conditions underground. Further digging at the threshold of the Grimpen Mire.

Friday 29 March 1991 SM-K

Cleared the spoil back to Gothic Passage.

Saturday 30 March 1991 SM-K, RW,

Laid a two slab charge in the slot in the floor of the dig.

Conditions still very wet with the surface stream flowing past the dig. The bang had disturbed the rock pile and this had to be gingerly rebuilt before work could recommence in the Grimpem Mire threshold. The slot was still constricted and digging was hampered by ponding of heavy drip. By the end of the session, the excavation had taken the shape of a pot with a lip and narrow slot on the Grimpen Mire side.

Saturday 4 May 1991 SM-K, RW

Still very wet at the digging face. The stockpile from the previous session was moved back to Gothic Passage.

Back on the surface, the stream was persuaded to sink in its bed at several points above the entrance, hopefully reducing the heavy drip underground.

Sunday 5 May 1991 SM-K, Bob Cottle and two helpers

The stream diversion had considerably reduced drip in the digging area and a small amount of spoil was moved to the stockpile.

The broken gate was taken back to Thrupe for welding repairs, and then returned to the cave where it is now held in place by a chain and padlock.

Saturday 17 August 1991 SM-K

Bailed a small amount of ponded water and continued digging out the pot. The spoil, including some small cobbles, was dumped on the left hand side of the Bridge Junction passage.

Saturday 24 August 1991 SM-K, RW

Continued digging in the pot, taking the spoil out through the Grimpen Mire. The pot is now about 3' deep and is linked to the main rift by a choked 1' wide slot, barred at several points by what appear to be chert ledges. As yet there is no drain into the open rift.

Monday 16 September 1991 SM-K

Bailed the ponded water and continued digging in the pot. Spoil was pushed into Bridge Junction passage. The fill comprises hard packed gravelly mud and occasional cobbles. A largish block on the left hand corner may be detached bedrock.

Wednesday 18 September 1991 SM-K

Further digging in the pot.

Saturday 21 September 1991 SM-K

Further digging in the pot. At a depth of 4' the walls begin to close in. There is an alcove - possibly an inlet - beneath the Grimpen Mire entry with a tiny bedding plane outlet beside it. Ahead, facing the rift, there are chert and rock bands barring access to the open rift beyond, and on the left side a buttress sloping across the bottom of the pot.

Sunday 22 September 1991 SM-K, RW

Laid a two slab charge on the left side buttress.

Cleared out the bang debris, sending the spoil back through the Grimpen Mire, and attacked the chert and rock bands in the rift ahead. There appears to be an undercut on the left downdip of the buttress but no sizeable connection with the open rift beyond. We may be in the basin of a pothole whose water originally spilled over the chert bridge into the deeper rift.

Saturday 28 September 1991 SM-K

Cleared around the left side buttress and laid a further charge.

Left the cave in torrential rain with the stream racing past the entrance shaft.

Sunday 27 October 1991 SM-K

Considerable ponding in the dig. Dumping space around the dig is now exhausted and all future spoil will have to be taken further up the cave for dumping. The floor of the Grimpen Mire will have to be lowered to facilitate one man bucket haulage.

Tuesday 19 November 1991 SM-K

Started moving spoil from Gothic Passage out into the Shale End streamway.

Wednesday 20 November 1991 SM-K

Continued the above operation, and later diverted the surface stream into the entrance shaft in the hope of washing away the mud content of the spoil.

Friday 22 November 1991 SM-K

Emptied all the spoil from Gothic Passage.

Saturday 6 March 1993 SM-K

Reconnaissance visit to check out a tourist party report of a sumped passage beyond Red Aven i.e. the Grimpen Mire under 6' of water!

Conditions appeared to be normal with only ponded water in the dig beyond the Mire.

Moved about 15 buckets of spoil from the stockpile below Red Aven and dumped them in Gothic Passage.

Concluded

Drunkard's Hole

Continued from page 56

dig, which comprised 89.0% Sandstone, 6.5% silicified fossils, 2.0% limestone, 1.6% chert and 0.8% vein quartz (n=240). This is in contrast to the much finer sediment found in the nearby Sidcot Swallet, considered to have been deposited from ponded up water (Bull and Carpenter, 1978).

Tratman (1963) suggests that the main development of the cave occurred during the last interglacial between 120 and 70 ka. The degree of infill suggests the cave existed prior to the last glaciation. During the last glaciation large amounts of sediment infill would probably have been washed in during spring snow-melt floods, eventually causing the blockage of the cave system, however to confirm this would require dating of speleothems using Uranium-series dating techniques. In many other caves on Mendip, for instance G.B. (Smart, pers comm.), similar fills have been dated and assigned to the last (Devensian) glaciation. Since then, much of the sediment has been partially washed out by post glacial fluvial activity.

The original stream which formed the cave has since been captured by the Bath swallet stream and the Hunter's Brook, probably within the last 10,000 years, causing the final abandonment of the cave.

The survey was completed in two parts, the entrance series and the extensions, the two sets of records being over a year apart. Readings were taken using Suunto instruments. The survey data was then reduced using Sean Kelly's *Surveyor 88* programme and the resulting coordinates entered into an Autocad file which was used to prepare the backbone survey.

Acknowledgements

We would like to thank Sir John Wills and the Burrington Commoners for giving permission to dig in Drunkard's Hole. Also thanks to Murray Knapp, Alison Hutchings and Graham Johnson who helped with the survey and all those Wessex diggers who have worked on the cave at some time, in particular Pete Hann and Aubrey Newport.

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Editorial notes:

In preparing this article for publication a couple of interesting notes came to light. Rodney Pierce tells me that the original name for the Devil's Elbow was Buggery Bend after Bertie Crook blew himself up in it with a carbide lamp. Also, Richard Kenney tells of meeting Crickmay at Chessington in 1953 where he worked for the OS Trig Survey department. Crickmay was apparently not a caver and claimed he was conned into doing the survey! I am grateful to the UBSS for permission to reproduce the 1943 survey.— NJW

club diary

September

4th:	CSCC Meeting, Hunter's Lodge
5th:	Committee meeting, 10.00am at Upper Pitts
11/12th:	BCRA Conference, Bristol University
18th:	Yorkshire booking: Pen-y-ghent Pot
19th:	Yorkshire booking: Birks Fell Cave and County Pot.

October

1st:	Meeting regarding action on car break-ins, Hunter's Lodge, 8.00pm
2nd:	Yorkshire booking: Juniper Gulf
3rd:	Yorkshire booking: Gaping Gill main shaft
8th:	Llangattock Management Meeting, Brynmawr
16/18th:	SUI Rescue Symposium, County Clare
16th:	Wessex Annual General Meeting and dinner
30th:	MRO Underground hauling practice in St Cuthberts Swallet
20th:	CSCC meeting, Hunter's Lodge

November

13th:	Yorkshire booking: Lost John's Cave
14th:	Gavel Pot

December

4/5th:	Hut working working weekend - fire escape fitting
4th:	Yorkshire booking: Top Sink - Lancaster Hole
5th:	Yorkshire booking: Wretched Rabbit
29th:	Yorkshire booking: Ling-Kin East/Rift Pot
30th:	Yorkshire booking: Notts Pot
31st:	Yorkshire booking: Lost John's Cave

1994

January

2nd:	Columns Open Day, OFD
15th:	CSCC meeting, Hunter's Lodge

February

27th:	South Wales CRO AGM, Brecon

March

19th:	NCA AGM. Stafford

July

9/10th:	British Cave Rescue Council Conference, Priddy

July 1995

14th	Wessex Gouffre Berger booking

From *Journal* No. 41 (August 1953)

40 years ago

When re-felting the Eastwater hut it was discovered that the habit of throwing ladders over the roof to dry had been the cause of damage to the felt, so would members please note that this is a definite 'don't' in the future. Owing to the limited amount of space at both the Eastwa ter and Hillgrove has been decided that members' personal property must ither. This applies also to food, and it can be used by a following party. t in the huts or thrown ntainly

SWILDONS SUMP

Every so often we hear a story to the effect that Swildons sump is either becoming silted up, or else that it is already impassable. The first of these is probabl true, the second certainly is not, for example, this June with a party we were unable to get through at the first attempt. Two head first plunges got as far as a heap of gravel, with shoulders and helmet bouncing about between floor and roof. A more cautious feet first examination seemed to show that a bar of gravel had formed about half way along. The gap here between fl one and a half tim eight

DRUNKARD'S HOLE

The loose boulder reported some time back has now been dealt with and the cave is safe to enter. (see Journal No.32, January 1952, page 12).

EASTWATER SWALLET - THE PRIMROSE POT SURVEY

Surveying is never a very popular pastime with the average caver, and when the passage to be surveyed is both remote and arduous, there is always a singular lack of helpers. So it was with the Primrose Pot in Eastwater Swallet. At an early stage in the survey of the cave we had traversed the full length of the Primrose Path to the squeeze but what lay beyond remained unmapped, and with the lack of midgets in the Birmingham group this state of affairs might have persisted indefinitely. However, the Easter trip to Yorkshire put a different complexion on things. On mentioning the matter to Willie Stanton, he admitted that for some time he had wanted to try the squeeze, and would be very keen on a trip. He also undertook to find some midgets and cajole them into the pot, of course being very tactful about the survey part of it. We wanted to have Howard Kenney with us, he being the only person ever to have descended the pot, and eventually he was persuaded that the survey was absolutely essential.