# The exploration of Hallowe'en Rift, Mendip Hills: the personal logbook of Vince Simmonds. 1991-2011.



Excursions [and other notes] involved in the exploration of Hallowe'en Rift; a cave, so far, formed within Triassic Dolomitic Conglomerate.

The exploration of Hallowe'en Rift was started in 1982 by Trevor Hughes with other members of the Bristol Exploration Club, then during the early 1990's Vince Simmonds and other, mostly, local diggers were active at a number of locations within the cave, including the start of the present dig in December 1991. The current phase of exploration was commenced in 2009, with the majority of the early work being carried out by Vince Simmonds and Alex Gee, now the regular team includes Rob 'Tav' Taviner, Graham 'Jake' Johnson and Nick Hawkes. John 'Tangent' Williams also has been known to lend a hand and on the odd occasion there has been assistance from Bob Smith and Callum Simmonds, with a guest appearance by Ray Deacy from Australia.

## 11<sup>th</sup> December 1991 – the early trips!

[At this time the known cave was to the west side of the entrance shaft. The early trips have been transcribed from my personal logbooks written at the time of exploration, some small grammatical alterations have been made]

With Jake.

It makes a change to do something new on Mendip albeit small. A drop down through a 15 foot entrance into a short crawl (getting a skip on the way) into larger bedding with heavily calcited roof. To the left a short slither soon closes down, ahead a crawl getting tighter in places also closes down after about 30 feet, but looks like a promising dig site for Tuesdays (this had previously been dug by 'Quiet John' Watson, BEC). To the right of the entrance crawl about 100 foot of grovelling leads after a squeeze to a small calcited aven and Trevor Hughes' old dig. The dig looks hopeless, seems to be a blank wall but we cleared some bang spoil away, filled the two skips and dragged them back to empty the spoil on the

surface. An interesting night; previously it had taken us about ½ hour to find the entrance in the dark, most of the time spent thrashing about in the woods and brambles, ended up standing right next to it!

#### 15th December 1991

With Jake and Nick.

The start of the 'not the blank wall' dig. Just like digging in Daren Cilau, dry and sandy following a very small airspace. Not the place for a great deal of clothing as it gets very warm; a helmet is also an encumbrance better with a zoom (a headtorch made by Petzl) and a bobble hat. We need to get a small skip system set up to get the spoil back. Progress is relatively easy but you do have to be careful not to block yourself in as I did, Nick had to dig the squeeze out so that I could get back out. A very productive couple of hours; and it won't be too long before Trevor comes down to see what we are up to.

#### 17th December 1991

With Jake and Rich Blake.

We didn't bother with helmets this trip, just a hat to keep the mud out of your hair and a Petzl Zoom for light. Also had a skip for spoil removal which made life a great deal easier. Shifted about 15 skips back, digging is a mixture of rock and very dry mud, thought we could feel a faint draught tonight. Brought home a couple of pieces of broken stal.

#### 18th December 1991

With Jake, Rich and Nick.

This is just a fun place to be especially with a spliff and a ½ litre of Amaretto – 'the Daren digging experience'. We also managed to get some digging done. An airspace has opened up although some hammer and chisel work is needed before further progress can be made. We hope we can get away without using bang for a while. Also a lot of mud models (*sculptures*) seem to be appearing probably something to do with this being such a mellow place.

Hallowe'en Rift is located on the hillside above and to the east of Wookey Hole (NGR ST 5353 4809) at an altitude 425 ft. there is a possible connection to some of the passages beyond the sumps in the Wookey Hole cave system.

## 19th December 1991

Got bored at home alone so decided to pay a visit to Hallowe'en Rift. The idea was to suss out a solo dig at the bottom of the entrance rift opposite the crawl (this is the start of the dig to the east side of the entrance where we are currently working). When I arrived I decided that I needed the jemmy at the dig site (west of the entrance) so I went to the end to get it. While I was there I managed to pull out some rock flakes to get a better look at the airspace, it looks very good, I could see a space about 4-6 inches high, 3 feet wide and about 6 feet in length, the roof at the end appears to dip down. I managed to find the chisel and tried to chip away the rock blocking the way on, but didn't make too much of an impression on it, a couple of shot holes and some bang would be much more effective. After that I returned to the entrance and started the solo dig. A bit of scratching about and I managed to get to a small aven, with a squeeze; a large rock was causing the constriction so I spent some time removing it; after that spoil removal was a lot easier. The spoil consists mainly of dry, sandy mud although there are a few rocks in it. Managed in all to gain 5-6 feet but can't really see a

clear way on perhaps after a couple of digging sessions something might turn up. There were plenty of midges and mossies buzzing about. There are some decorations, although they are old and fractured. A very pleasant way to spend a free evening, much better than sat at home watching TV by myself.

#### 20th December 1991

With Jake and Tony 'J'Rat' Jarratt.

Yes again! We went down to see if we could remove the constriction. The new BEC Bosch drill was used on its first mission and a brand new drill bit, it cut into the rock in no time, soon had 4 shot holes, it took a bit longer for J'Rat to prime the holes. While this was going on Jake ran out the wire and went for a play in the entrance dig. When we set the charge off all the leaves around the entrance jumped, well moved anyway. Hopefully the object is no more and we can now make a little forward progress.

#### 22<sup>nd</sup> December 1991

With Jake.

We cleared Friday's bang debris and tried hammering some more of the constriction away but another bang would be more productive. The air gap looks very inviting; might have another attempt at hammering with a heavier hammer and larger chisel. J'Rat's off to Ireland for a week so no bang or we'll have to ask someone else.

## 26th December 1991

With Keith Savory.

I persuaded Keith to come over and put a bang in at the end. We plastered a stick to try and loosen things a little. Only took one hour from the gate and back. Hopefully there will something to shift when we get a chance to go back down.

## 31st December 1991

With Jake and Rich.

The last trip of the year – anymore will be another rescue!

We cleared the bang put in by Keith a few days ago and one more bang might get us into some caveable passage – not much perhaps but still some.

## 2<sup>nd</sup> January 1992

Keith phoned to say he couldn't make it so I ventured up the hill to drill the shot holes ready for Keith tomorrow. At last I also remembered the heavier hammer. I tried to hammering for a little while but didn't make any progress so drilled the shot holes and called it a night.

# 4<sup>th</sup> January 1992

With Jake and Rich.

Keith did the business and it had worked superbly. We had plenty of spoil to remove and the obstruction was no longer there. Rich managed to squeeze as far as we could see and reckoned the only air space was off to the left; we reckon on a length found as 1.72m,

because that's how tall Rich reckons he is. We are going to completely dig out the end chamber to give us more room to work and then we may also get a better idea of what to follow.

# 7<sup>th</sup> January 1992

With Jake and Rich.

Bloody awkward digging! Scrape back mud and rocks into a pile and then reversing 10 feet dragging the mud and rocks with you, load it into a skip and then go back for some more — we love it really! At the end of each session Rich (anorexic whippet) managed to bet a better recce of the furthest points and reported air spaces to the left, right and straight ahead. A little tidying and excavation is required before we might gain access, but it sounds promising.

## 8<sup>th</sup> January 1992

With Rich and Andy Smith (the 'Apprentice')

When we had started to dig it was relatively dry and comfortable but now a lot of drips have appeared and so have some puddles making lying about a trifle damp, at least the digging is still dry. We spent this session clearing the loose stuff that Rich had made last night; it is much tighter at the end and it is becoming a little desperate. Rich and Jake are off to foreign parts so I shall have to come up by myself and spend some time trying to lower the floor.

## 14<sup>th</sup> January 1992

J'Rat said he might be over but he didn't show up, so I had a night by myself. I went to the end and chiselled off some of the floor to make it a little easier to get to the very end. I pulled the skip back, loaded it up and then went back to have a go at the opposite side of the entrance rift. There's one rock that just won't come out although it's loose there's always something just stopping it; I'll get it next time!

## 15<sup>th</sup> January 1992

With Andy Smith.

I was in two minds about going until Andy phoned – so off we went! Walking up the hill the farmer drove across for a chat, he said that he would like a more permanent entrance to the cave for safety reasons; I replied that it shouldn't be a problem. Back to digging, I made a small tray to drag spoil back instead of having to brush it back with your hands, and it worked a treat. We started to digging out the floor to make what was caveable more digable; and I seemed to detect a very faint draught. Good session.

#### 21<sup>st</sup> January 1992

With Tav.

Now that the baby has been born Tav has decided to come out of retirement. The lid that Trevor had fitted on Saturday is a good job although some tidying up may be required. We carried on digging the loose stone and mud away, but it wasn't getting any easier. It seems to be closing down a bit or the mud is not as deep as we had hoped and we've got down to another mineral band. There is still a slight movement of air. Tav was quite impressed and thought the dig "looked promising".

## 25<sup>th</sup> January 1992

With Roz Bateman and Matt Tuck.

We managed to scrape off a few more skip loads of mud; a bang is needed just to break up the band of calcite in the floor. We then crawled up to Trevor's dig to have a look and make a little trip of it.

## 28th January 1992

With J'Rat.

As I was walking down to Bat Products J'Rat was trying to phone me, we were both thinking of blowing up the end of Hallowe'en Rift. When we got there it was a very quick trip, 3 shot holes in no time, the longest job was filling the holes, but the deed was soon done. Back to the surface to set off the charge and job done – lovely!

## 29th January 1992

With Andy Smith.

We cleared away the debris from last night's bang, it was a little bit 'fumey' but not too bad. The bang had worked well but, unfortunately it seems we need another one [or two?]. A stal [calcite] bank looks to be causing an obstruction, if there was enough room to swing a hammer we might be able to chisel through it; anyway J'Rat wants to get rid of the bang he has before he sets off for Vietnam in March. It's getting muddier and wetter everytime!

[A short break ensued as attention became focused on a number of other Mendip digs at Welsh's Green, Wigmore Swallet and Stockhill Mine Cave and there was an expedition to Lechuquilla Cave in New Mexico, USA]

## 2<sup>nd</sup> September 1992

Nothing much seems to be happening on the top of the hill so I thought I would go and get the tools from the end of Hallowe'en Rift. On the way out I decided to have another go at the dig near the entrance. I had a real battle with one particularly large rock but when that was out of the way digging was relatively easy. The site might have limited potential (*okay! I was wrong*) but it is a pleasant solo dig, at the moment. I don't expect it will be long before the spoil needs hauling out to the surface and that will require some assistance. Dug out a nice piece of stal for my collection at home.

# 4<sup>th</sup> September 1992

I continued to stuff mud and small stones into any place I could get it; pulled out several larger stones and left them at the bottom of the ladder. It's bloody hard work by yourself! There is a small air space to work towards but at this stage it's impossible to say what, if anything is going to develop. Earlier in the day I walked the dog (*Trog*) up to Arthur's Point and looked across to Hallowe'en Rift and I thought that if I can work my way into the hill there is a very prospect of finding something.

#### 5<sup>th</sup> September 1992

With Jake.

Another pair of hands certainly made a big difference; we must have made nearly 2 metres. We dug into another small, rifty space 2-3 feet wide, 6-7 feet long and up to 18 inches high but no real way on. The plan is to dig down and see if anything goes that way. There were some big rocks in the way but we managed to dig either around them or over them, most of the digging is relatively easy. Jake seems suitably impressed, another helper and spoil can be dumped on the surface.

## 9th September 1992

With Jake, J'Rat and Ivan Sandford.

When Jake and I arrived J,Rat and Ivan were already beavering away, so as they concentrated on digging Jake and I proceeded to remove the spoil to the surface. J'Rat sent back some impressive stones to be disposed of. We had a quick look at the end to see J'Rat had made good progress, the bedding plane seems to continue and J'Rat reckons there's a draught; looks good!

# 11th September 1992

Another solo digging trip. J'Rat had been up last night and shifted a fair amount of spoil; I tidied up some loose crap and cleared a good deal more. There seems to be a 'T' junction with two possible ways on; to the left a calcite block needs to be removed and to the right there are stones, cobbles and dry mud, both ways on have a small air space. There is a small air movement but I can't be sure where it's coming from, I don't believe its surface circulation. There is plenty of spoil to be shifted back to the surface now.

I came out to a superb moonlit evening, really bright in the glades amongst the trees and a beautiful clear sky.

I really can't believe the theory that Hallowe'en Rift was an old resurgence (as suggested by Willie Stanton), chatting with Keith it's more likely to be localised drainage, but I suppose the experts will argue the toss!

Still it's a fun place to dig and hopefully it will remain possible to work alone if needs be. The new extension is now pushing a good 20 feet.

#### 14<sup>th</sup> September 1992

Solo

Nicky (*my now ex-wife*) was working late so decided to have a scratch around for something to do. I started by clearing some of the crap left at the bottom of the entrance, warm work carrying up a rock and then pulling up the bucket – repeated several times. When that was finished had a poke at the end to the left and to the right. There appears to be a small rift to the left but a bang could be required to gain a better insight; still a little unsure about the air movement at the moment. There's a good pile of spoil to be shifted back to the surface; started to feel a bit knackered so only a short session.

#### 16<sup>th</sup> September 1992

With Jake, Rich and Ivan.

Good to see Blakey back after his exploits in Spain and Austria. We cleared all the accumulated spoil before continuing with the digging. Removed several rocks and some mud from the right hand side before swapping over with Jake; he continued work in the

same place before becoming disenchanted. Jake doesn't have too much enthusiasm for the spot, although I still think it is worth persevering for a little while yet. I'll have to wait until Keith gets back from Ireland and then blow the left hand side. I'll probably continue scratching about by myself if necessary.

Some bloody big cave spiders, with egg sacs, in the entrance shaft.

[At this time interest in the site waned as we put our efforts into a number of other Mendip sites leading to breakthroughs in Welsh's Green and Whitepit. In the mid 1990's the effort became concentrated in South Wales following the discovery of Ogof Draenen, where there were significant breakthrough's such as the first round trip and Big Country. There was some sporadic interest at Hallowe'en Rift but this didn't add to the known length of the cave]

# 25<sup>th</sup> July 2009 – when things got started again!

I got up late, much to the dog's annoyance. Finally though I got my act together and set off for Wookey Hole. Not running today saving all my energy for the Lakeland 100 next week. Plan was to go up to Hallowe'en Rift and look for Stanton's reputed resurgence. Walked around for an hour or so, found not a lot, so headed off towards home. Noted that the soils are very thin on the hillside and much rock is exposed, any bedding seems to run parallel to the hillside. Popped into the Belfry for a chat with Alex Gee and Bob Smith who have started to dig in Hallowe'en Rift and arranged to meet up with them tomorrow morning.

## 26th July 2009

Arrived at Hallowe'en Rift, Alex and Bob were already there along with Duncan Butler (BEC). I slipped on my oversuit and a head-torch and ventured underground to become acquainted with the cave again. First of all went down to trace the suggested resurgence site but could find no obvious signs to support the claim. Then went along to an old dig site where I used to dig with Graham Johnson and Richard Blake in the early 1990's. Bit longer and rather more snug than I remember, Alex described it as a 'wormhole'. Returned to bottom of the entrance to assist with the digging effort where Alex and Bob have decided to resurrect another of my old dig sites to the east of the entrance shaft, only they plan to make it much larger!

# 5<sup>th</sup> September 2009

Met Alex at the Belfry [Buster, my Jack Russell terrier, came too] and we made our way over to School Hill, Wookey Hole from where we made our way up to Hallowe'en Rift. On the way we noticed a small collapse feature along the path to Hallowe'en Rift and agreed to have a little poke after digging at Hallowe'en Rift. At Hallowe'en Rift I was underground first and set about clearing some bags Alex had filled on a solo effort a couple of weeks ago. Then I got on with the task of passage enlargement. Some interesting sediments were encountered and discussion ensued, photographs were taken, we then swapped places and I took my turn at hauling. After a couple of hours we called it a day at Hallowe'en Rift and made our way to the collapse feature noticed earlier that morning. A quick scratch around and we soon decided it was likely to be the top of a small rift, possibly linked to Hallowe'en Rift, but it is too close to the path to open any further and it was backfilled.

#### 6<sup>th</sup> September 2009

With Alex.

My turn to haul first, it was a lot easier today as the rope wasn't so slippery. Pulled out a number of skip loads of rock, old stal and sediments and scratched around on the surface

until Alex wanted a blow. We swapped around and continued in the same vein. Going to take some samples of the sediments discussed yesterday so avoided digging in that area. Underneath the top 75mm – 100mm of sediment there is a tremendous quantity of broken stal, I think that the cave might have been affected by a slip fault, possibly linked to the Ebbor overthrust.

## 7<sup>th</sup> September 2009

Solo. In the evening I strolled up to Hallowe'en Rift to take some sediment samples for analysis. Sample from the grey layer (2 no. jars), the red/brown layer (2 no. jars) and from the surface (2 no. jars). Difficult to take surface samples to any depth due to the very thin soil cover. During my time underground I started to break up a large rock ready for removal to the surface, gave up after twice hitting my hand with a mighty thwack!

#### Results of the chemical analyses:

Determinant		Surface	Red/Brown	Grey
Arsenic	mg/kg	42	47	54
Barium	mg/kg	179	160	361
Iron	mg/kg	36500	43400	52130
Magnesium	mg/kg	3925	4468	4724
Manganese	mg/kg	3147	1988	7944
Zinc	mg/kg	487	810	384
pH value	Units	6.4	7.3	7.3
Carbonate	%	3.8	14.3	1.8
Soil organic matter	%	0.9	8.0	1.2

## 13th September 2009

Solo. Went down into Hallowe'en Rift to finish breaking up the large rock, this time I was armed with a heavier lump-hammer from home. Soon reduced the rock to small, manageable lumps, then proceeded to dig out another large rock and broke that up as well. Stacked all the spoil at the bottom of the entrance ready for hauling to the surface at a later date. Had a general tidy around before heading off to Trevor Hughes (TH) original Hallowe'en Rift dig started in 1982 – a bit more snug and longer than remembered. Need to get caving fit again!

# 26th and 27th September 2009

Couple of good morning digging sessions with Alex. We managed to shift a considerable quantity of spoil and another couple of sessions should see us in virgin ground as it were. Decided to carry on working in line with the roof tube for a while. Consulted the survey and it appears we could feasibly work our way towards Wookey 22. There is a gap of about 80 metres, not sure what the vertical difference is, will have to ask Trevor Hughes who surveyed Wookey 22.

# 30th September 2009

Solo trip with the intention to obliterate the rock/stal lump at the bottom of the entrance, took my heavy duty lump-hammer to aid in the task – job done! I then proceeded to dig out another load of rock/stal and made another pile to be hauled out. Got my head in as close as possible to the general direction we are heading in and I was certain that I could feel a draught of fresh air – it could be convection from the surface, we will have to wait and see!

I had a thought that the sediment is the result of haematitic rock breaking down to become ochre – there is considerable iron content – need more analysis!

#### 2<sup>nd</sup> October 2009

Couldn't be arsed with work, so took the day off and went digging instead. Spent 1½ hours or so digging mixed spoil from the floor and sides, consolidating Wednesday's effort. Roz [my wife] turned up and we cleared the rocks from Wednesday's session. Kept being bothered by large, noisy bluebottles, squatted several but more appeared so gave up squatting them. All in all a very good session.

Digging solo was ok, filled the skip, dragged it to the bottom of the entrance, climbed up and hauled it out, then repeated the procedure again and again.

In the evening made a return visit with Alex, I spent most of the time on the surface hauling while Alex did some digging. Seems to be a rather large lump of stal barring progress in the direction we wish to go, we'll have to go around it, or try and chisel through it, still a bit more to clear away to get a better assessment of the situation.

#### 4th October 2009

With Alex, Bob appeared later in the morning. Progress has been hampered by an accumulation of calcite. We have decided to change direction and see if we can work around the obstruction. Just requires a bit more effort – more hammer, chisel and bar work!

#### 11<sup>th</sup> October 2009

Miserable, grey, wet morning; I was supposed to be getting some help from Roz and Hazel but that didn't happen for one reason or another. Took a bar with me to investigate a little feature I noticed while out walking yesterday in Smokham Wood, off the green lane that follows the ridge up from Wookey Hole to the top of Ebbor. In one of the small stone quarries is a low bedding chamber with a small rift leading off. Digging was inconclusive and it is thought the site might once have been dug out by badgers. Over to Hallowe'en Rift, tied the dog to a ladder and started to clear some loose debris, dog then started to growl so exited the cave to find a black Labrador had turned up, eventually it went off with its owner and I returned to the task in hand. I hauled up a few more skip loads until the rain became too heavy and headed down the hill. Roz and Hazel turned up as I was getting changed.

#### 14<sup>th</sup> October 2009

Scratched around for an hour or so, difficult to see an obvious way on at the moment. Might be an idea to clear the rubbish from the bottom of the entrance and see if there is another way to get around the stal/rock obstruction. I went along to my old dig site to get in some squeeze practice, then on towards TH's old dig to see whether there might be an option along that way.

## 17th October 2009

Alex, Bob and Callum on his 1<sup>st</sup> digging trip, and Buster came too. As planned we set about clearing the spoil form the bottom of the entrance. I did the hauling while the others went underground. Callum broke up some rocks and went for a little exploratory trip around the other parts of Hallowe'en Rift – not too far though. Bob came to the surface and scratched around with the wall and 'sort of' assisted with the hauling. Cleared all the spoil and made some progress lowering the floor – we had made a decision to see how deep the fill is in Hallowe'en Rift and to see if there is any evidence of the deposition of sediments.

#### 18th October 2009

Alex had arranged a trip to Hallowe'en Rift for Derek Ford [the eminent geologist] and Graham (?). We all met at the Wessex hut and set off to Wookey Hole on a glorious autumn morning. Derek is now in his 70's and a little shaky so needed a ladder and line in the entrance. Quite a discussion ensued, and we looked at fluorescence although not in great detail – lamp needs some batteries, so might give it another go by myself one evening. I took Graham for a tour of the dig's, looking at some undisturbed sediments and the fine roof features along the passage on the way to my old dig. We discussed the idea of earth tremors and stal damage and some of my ideas were accepted as plausible. A very enjoyable morning followed by further discussion at the Hunter's.

## 23rd to 25th October 2009

Friday evening: Alex and me

Saturday morning: Alex, Callum and me

Sunday morning: Alex and me

We continued to dig down to find a floor beneath the entrance. Still much the same material to be excavated, mostly rock, stal and sediment; and more interesting minerals were uncovered. Sunday morning a lesser horseshoe bat flew into the entrance and was quite curious as to what was going on and it hung around on the wall about 750mm from where I was sitting before plucking up courage to fly down into the rift.

#### 7<sup>th</sup> November 2009

We had agreed an earlier start this morning, but at the Belfry Alex looked rather worse for wear after Friday night frivolities at the Hunter's, and later at the Belfry. We got to Hallowe'en Rift and I let Alex go underground to work off the hangover; Duncan Butler turned up some time later, also not looking too good so when Alex finally wore out Duncan took his place. I spent three hours hauling and my hands were starting to get sore; the rope was very slippery again, even after turning it around. Eventually retired to the Hunter's taking the rope with us for Alex to wash later.

#### 8th November 2009

Didn't bother getting to the Belfry too early, it was Priddy fireworks last night and I assumed a party might have occurred – I was right! Some sorry looking people in the Belfry and Alex didn't appear for a little while. Met up with Mark 'Gonzo' Lumley who had arrange to come up and take some photographs of Alex for the forthcoming 'Wookey Hole' book. Eventually got to the cave and I took my turn underground and continued to clear spoil from the bottom of the entrance. We eventually stopped digging to allow for Alex's photo shoot.

## 29th November to 5th December 2009

**Longwood valley** – dug open and backfilled an active sink, too much interference from busy bodies! (refer to hand-written logbook)

#### 12th December 2009

With Alex and Callum. Best part of a month [or more] since the last digging session – seems there is plenty of lurgy about. Alex did the underground stint, I hauled until the rope became too slippery – wasn't feeling 100% either – bit of a negative vibe.

#### 13th December 2009

Alex had washed the rope to make hauling a bit easier. My turn to dig; carried on downwards exposing the sand layer that Alex had uncovered yesterday. We can now see definite evidence of water transport and put together some sequences of deposition.

Much of the stal at the sand layer (red) appears to have been naturally fractured as there is a coating of sediment all around and no evidence of a clean breakage. Interestingly, the edges are rounded possibly the result of water action.

The thin grey coarser grains may have been deposited as the result of eddying flow or a flood event. The lack of red colour might be the result of winnowing or leaching over time.

Left Hallowe'en Rift with a positive vibe today. Next job might well be surveying so that we can get some fine details recorded. Also needs a line survey into my old dig to the west of the entrance, this will aid the recording of features such as scalloping and dog-tooth spar, etc.

#### 28th December 2009

Surveyed the dig site with Alex, both feeling crap and tomorrows dig session cancelled.

## 23rd January 2010

We carried out a surface profile of a small valley to the east of Hallowe'en Rift. The dig has become a pool so spent some time crawling about and discussing features. Alex bailed out the pool while I returned to the surface.

# 13th January to 25th April 2010

**FUR Hole** – got distracted for a while at this site north of Smokham Wood.

## 20th February 2010

Alex had sent an email to Charlie Self inviting him to come over and look at FUR Hole and we ended up on a geological and mineralogical field trip. At FUR Hole we discussed the crystal formation and whether or not there is evidence for hypogenic origin or pool formation, this was not concluded. Then over to Hallowe'en Rift and sifted through the spoil heap for samples, before I ventured underground to retrieve a possible sample of gypsum, although Charlie suggested it was calcite. We then discussed what I had previously muted to be evidence of earth movements where there are shear zones in the flowstone, particularly noticed in the roof. One particular lump of flowstone in the spoil heap provided pretty conclusive evidence for an earthquake and will be part of a table top/poster presentation at the forthcoming Cave Science Symposium to be held at the University of Bristol (06/03/10). Several photographs were taken.

A fine morning and a warm walk back to the Belfry with a tackle bag full of digging kit and lumps of flowstone.

#### 12<sup>th</sup> June 2010

With Alex and Bob. The return - again! After some discussion we agreed to try and head north again towards Wookey 22. After a bit of tidying up we assessed the situation and decided to attack the stal blockage. We managed to shift a bit but it's going to be hard work

- we need some more wedges to see if we can peel of layers of calcite flowstone. It might be a long term project...or not!

#### 26th June 2010

With Alex and more stal/calcite bashing, slow progress, nothing hauled to surface. It's very warm on the surface and we thought that we could detect a very slight draught, or at least cool air emanating from the end of the rift area – at least that's encouraging.

## 11th July 2010

With Alex, just hacking away at crusty stal and mud, hopefully heading into the hillside – sort off!

# 24th and 25th July 2010

With Alex. Saturday: spent the morning clearing away the debris that has accumulated, using the mattock to clear away the floor to give more space. I spent two hours hauling while Alex was filling the skips.

Sunday: my turn to do the digging while Alex was on hauling duties. I carried on with the mattock to continue enlargement of the working area, also worked at the end for a little and managing a fair rate of skip filling. The fill comprises mixed crystallised sediment, crusty stal and the occasional boulder – still tough going! Swapped over with Alex, but skips to the surface just about ceased, just two in one hour – got bored!

## 21st and 22nd August 2010

With Alex, a couple of two hour morning sessions on Saturday and Sunday comprising one hour of digging and one hour of hauling. We decided to fill the pit at the base of the entrance after a short debate, this was to make digging quicker and if we wanted to move spoil out to the surface it would make things easier. At least we have made a small amount of forward progress; it's relatively comfortable digging but rather on the warm side.

## 4th and 5th September 2010

With Alex. Saturday morning: more of the same until just as we about to leave I detected a small, cool draught issuing from a small, straw sized hole – very encouraging! It gives us

something to aim for, and it's in the desired direction.

Sunday morning: worked around and expanded the draughting hole into something a bit larger; and the draught is still strong. There is a bit of open space but, rather frustratingly, quick progress ahead is blocked by solid flowstone that will require some hard work to remove. I couldn't quite get my head around how the passage might develop.

## 10th September 2010

Solo. I decided to spend an hour or so over at the dig in the evening hammering and chiselling away at the calcite obstruction. The draught was still strong. I made slow but steady progress, just half a dozen skips and a rock. The calcite appears to be less compacted [or solid] lower down and there might be the possibility to undermine the obstruction and then smash it downwards; time will tell. I think Alex is getting a little over excited at the prospects just yet.

## 11th and 12th September 2010

Saturday morning with Alex, and Bob came too! Bob turned up with 'digcam' to see if we could see what was over the obstruction. I didn't see anything as I was holding the camera at arm's length; the result was rather inconclusive, but a useful little tool all the same. After that interlude we carried on where I left off last night taking it in turns to batter the obstruction. Progress was steady but tedious and after two hours I left them to it.

Sunday morning with Alex and some more of the same just hammering, chiselling and smashing – it's not going anywhere fast!

## 20th September 2010

Solo. An evening trip over to Wookey Hole to check out Alex's weekend effort especially after his rather excited phone call. He's managed to poke another hole through the stal blockage; the main draught is still from the original hole on the left side of the passage. I scratched around a bit, chiselled and hammered, got bored and went home.

#### 2<sup>nd</sup> October 2010

With Alex and Bob.

We arranged to meet at School Hill rather than the Belfry (BEC AGM to be avoided!). I arrived first and made my way up the hill to Hallowe'en Rift to start digging. I decided to work at the right hand side of the stal blockage where it seems to be easier going, the stal is fractured and there are more mud layers. Undermining the stal and then hammering down onto the layers into the space was working well. Alex and Bob about 45 minutes later, we each then spent about an hour battering and mining away at the dig face. When my turn came around I managed to clear the lump of solid stal that was impeding progress and ahead there seems to be easier going and we are nearly able to see into a small roof space where the draught appears to come from. After three hours of digging I decided to leave while Alex and Bob stated on onto the afternoon to continue with the digging effort.

#### 6<sup>th</sup> October 2010

Solo. Alex sent an email saying that they had broken through the stal blockage and were just digging sediment beyond, so decided to check it out for myself on my mid-week day off [recession hits so on a 4 day week at the moment]. I spent a short time tidying the spoil dump at the bottom of the entrance shaft before going up to the end. It is definitely easier digging – nice dry sediment! Wormed my way a body length into a small roof space – to the left mostly filled to the roof, although there is some small roof space but can't see much more than a metre; straight ahead there is slightly more space over the top but couldn't quite see far enough. Possibly come up to Hallowe'en Rift for another solo session on Friday evening, Alex is keen to dig at the weekend. Levelled the spoil along the passage floor; looking back along the dug passage it's pretty impressive, more enthusiastic about digging sediment than battering stal.

#### 8th October 2010

Solo. Up to Hallowe'en Rift and spent some time enlarging the working area – so that Alex might fit!

#### 9<sup>th</sup> October 2010

With Alex. I arrived at School Hill early and made my way up to Hallowe'en Rift. I spend a while taking some photographs, although most didn't come out too well. I resorted to digging and emptying the skips at various spots along the approach passage. Alex then turned up so I let him go ahead and dig while I shifted and dumped the spoil; we made good progress, possibly about 6 metres [on reflection more like 4 metres, 2013]. Alex reported back that he could see open space but progress was hampered by another block of stal, my reply "keep on digging and try to go around it". Alex and I changed places and I managed to reduce the blockage with a few blows with a lump hammer and then dug past it into relatively open space with some rather fine little formations and a good draught. I continued to dig for a short while before letting Alex takeover and enter into the space first (he's not had a breakthrough before). Eventually he got there and reported back – a relatively low, domed chamber looks to be the way ahead to the right but needs some work, constricted to the left, but in the floor is a rift ~2 metres deep with what appears to be a false floor with cobbles/boulders. Later I tried to enter the rift pot but couldn't guite get in; there will be some tidving required before entry is possible. I tried some more photographs but these were again mostly disappointing. There was a little more scratching around and chatting but e we were both knackered, my left shoulder was particularly sore, so we called it a day and headed for the surface. 51/2 hours.

#### 12th October 2010

Solo. From the bottom of the entrance shaft I took a bearing to 'Stal Bend' (050°/230°: ~7 metres and from the bend to breakthrough point (045°/225°: ~5 metres) – the overall trend of the passage is to the northeast. I tried to take some more photographs which, again, didn't come out as well as hoped for, might try with a mini tripod and self-timer. Put the camera kit away and then had a scratch around the top of the rift pot, hammered away at one of the large boulders and did manage to break it, unfortunately it fell down into the pot along with a couple of others. With a bit of gardening I was able to crawl over the top of the rift pot into the low chamber ahead about a body length, this enabled me to see ahead; the chamber/passage continues ahead about 0.10m to 0.30m high and 1.50m to 2.00m wide, I could see ahead possibly 4m to 5m and it doesn't appear to close down. The floor is appears to comprise calcite cobbles and boulders and some formations, it's extremely dry and dusty and there is still a faint draught (pressure patterns are on the change). Retreated and did some more gardening work along the approach crawl. The prospects seem very, very promising. Shoulder still feels a little stiff. 1 hour.

This new area feels old, possibly because of the dryness and colours of the place.

#### 15th October 2010

The idea was to spend some time gardening along the approach passage which I did for a while before moving up and tidying up over the top of the pot. Eventually I reached the previous limit of Tuesday evening and thought to myself that if I could get ahead another metre or so then we might have room to turn. The blocks barring progress were just too big to shift so decided to go around them. I quickly got into digging mode and shoved, dragged and scratched my way forward, then back dragging large boulders to place them in a more comfortable position. After a lot of thrutching [and cursing] managed to gain access to a draughting and well decorated chamber up to 3m wide, 0.30m to 0.40m at the highest point and I could see ahead possibly 4m or so. Did not enter the chamber, it's too delicate. Exhilarating! 2 hours.

#### 16th October 2010

With Alex and Bob.

I got up to Hallowe'en Rift early so that I could take some photographs of the decorated chamber, this time I took a small tripod and used the self-timer, used auto and night modes to see if the end product is of a better quality. After the photo attempts spent some time 'gardening' the approach until the others arrived. We swapped positions so that they, in turn, could see the progress, I continued with the garden duties. After a chinwag and mutual agreement to avoid any damage to the chamber we decided to seek an alternative route down the rift pot! It took a considerable effort to shift some large calcited boulders but eventually I was able to squeeze down into the rift pot. To the left [west] under a gnarly low arch and crawl the rift continues for about 2m but becomes too tight at a pinch point where there is a possible continuation beyond about 0.75m high and 0.50 - 0.60m wide turning north, but some work is required to gain access and to confirm this [a mid-week task?]. Back at the pot and, very surprisingly, there is a way on under the north side where a phreatic tube about 1.50m wide and 0.30 – 0.40m high leads off, I made some progress with a little bit of digging and gained about 3m to within a metre of an apparent choice of direction; to the left a partially sediment filled tube and straight ahead another partially sediment filled tube, there is a strong draught and things are looking very good indeed. There is also the possibility of another way on straight down the pot. We are almost spoilt for choice, emerged knackered but very happy! 5 hours.

Chamber has been named 'Merlin's Magic Milk Parlour' and the rift pot 'Witches Cauldron'.

#### 19th October 2010

Solo. Tried to lower the large block at the top of Witches Cauldron (WC) but was not quite as successful as I would have hoped. So went down the pot and set about widening the pinch point [on the west side] with a hammer and chisel – it was far too hot with a sweatshirt on! Eventually I made it just about large enough to take a look into the possible 'passage' which, unfortunately, turned out to be a solutional alcove. I then decided to turn my attention to progressing further along the phreatic tube, which was draughting well, before calling it a night. About 1 hour.

#### 23<sup>rd</sup> October 2010

With Alex, we planned a digging session at the bottom of WC. Alex spent a while trying to get down the pot before we swapped places and I started to dig at the bottom, passing rocks up to Alex before shifting spoil back down the approach crawl. We came to the decision that we needed to make spoil removal more efficient and easier, the large boulder at the top of the pot restricting access had to go, it was too big to drag along the passage so we had to break it up. Set about trying to break it up with a lump hammer, not very successfully, I managed to get myself into a position to clout it with the sledge and eventually, after 1½ hours and both of us battering the rock with hammer blows, the boulder split and we were able to further reduce it in size and get it shifted out of the way. That done Alex then had enough room to get down into the pot for his first look around and he was suitably impressed. After 4 hours of hard labour we decided to call it a day. At School Hill we met Roz and Callum who had come over to meet us at Hallowe'en Rift but were obviously too late. They continued up to Hallowe'en Rift for a tourist trip while Alex and I went back to the Belfry for coffee.

#### 30th October 2010

Solo. After a slow start to the day got my act together and arrived at Hallowe'en Rift around 12:30. Headed up to the phreatic tube and spent the majority of my time scratching away and worming ahead, dragging the spoil back and dumping it at the bottom of the pot. Got up to and passed the left junction which looks too tight and continued along the larger tube straight ahead. When my shoulders began to really ache I decided to call it a day, I reckon

nearly 6 metres along the tub now. I decided to go up to see the 'pretties' and spent a while gardening the approach before heading out of the cave. About 2 hours.

#### 6<sup>th</sup> November 2010

With Alex we spent the first 1½ hours of today's session hauling spoil back to the surface from the bottom of the entrance shaft, making space for more spoil later. We then set up a drag system to remove spoil from the pot back to the base of the entrance. Alex had supplied a couple of hawser laid ropes although one doubled was adequate for our needs. The pot required a little attention before the skip would fit and the approach crawl was also 'gardened' a little to ease the progress of the skip. Eventually we had managed to get the drag system operational and with a little effort several skips were hauled up the pot and dumped at the bottom of the entrance shaft. After 5½ hours we decided to call it a day and head for our respective homes dropping Alex at the Belfry so that he could collect his van.

#### 10th November 2010

Solo. Rather a half-hearted effort really, still I managed to get some spoil out of the phreatic tube. I used a drag tray made spoil removal a bit easier, also didn't bother with a caving helmet, just wore a beanie hat which meant that I could turn my head around more easily, far more comfortably, just need to take care not to bump my head – at least not too often! Just 1 hour.

#### 13th November 2010

With Alex, we first had to go to the Wessex to scrounge some plastic drums to make into skips – success - returned to the Belfry to cut them up as required. Spent the first hour or so at Hallowe'en Rift shifting spoil from the base of the pot and also dug the floor to make more dumping space, it also makes it easier for Alex to get into the tube. We then concentrated on getting spoil back along the tube using skip/tray and drag line – it worked rather well and good progress was made. Still prospects along the tube look good indeed! 4 hours.

## 20th November 2010

With Alex, we spent the first hour clearing last week's spoil from the bottom of the pot back to the bottom of the entrance; this will require a clearance session soon. Took it in turns to 'worm' our way along the tube, there seems to be something off to the left, either a passage or a turn, but can't quite see enough yet. Still appears relatively open('ish) along the right side and there is, of course air movement. Spoil is still dry and found a lump of broken stalactite in the sediment and it wasn't eroded – good sign? Possibly. 4¾ hours.

## 2<sup>nd</sup> January 2011

With Alex and Bob, our first opportunity to dig for a while due to some wintry weather – a substantial amount of snow – making travel difficult. Alex drives up from Southampton collecting Bob (who doesn't drive) on the way.

We spent the first part of the session clearing spoil back out to the surface, then moved forward to clear more spoil from WC, before moving into the tube. Soon wore Bob out so swapped places and I removed spoil from the pot while Alex dug along the tube. Another swap around and I changed places with Alex and carried on removing sediment from the tube. There is a bit of a pinch point that is awkward to dig and will slow progress a bit. There still appears to be a way to the left cannot quite see far enough ahead, it is possible that the some sediment ahead comes from above, time will tell. Bob had had enough and

returned to the surface while Alex and I continued for another  $\frac{1}{2}$  hour before joining Bob on the surface and heading off.  $3\frac{1}{2}$  hours.

## 22<sup>nd</sup> January 2011

With Alex. After some heavy rain a few days ago there are a lot of drips and puddles, it became very damp and claggy, cold as well. After about an hour or so of digging each we decided to call it a day. We did pull out a very interesting piece of stal that had obviously not been transported too far.  $2\frac{1}{2}$  hours.

## 29th January 2011

Back for more of the same!

With Alex, spent ½ hour or so clearing spoil from the base of the entrance shaft before moving forward to clear WC. It's still claggy but the drips aren't quite so strong, still cold though. After clearing the spoil from the pot I went along to the end to continue digging, while Alex sat in the pot hauling the skip back. Awkward digging, tiring on the shoulders, being somewhat constricted as spoil is removed then forward progress is at a fairly steady pace. The main development appears to be along the left hand side and it is possible that the rib of rock in the floor is where two phreatic tubes meet. Beyond the pinch point, which I am now able to pass, the tube dimensions are bigger to the left. Still need to clear more sediment from across the width of the tube to see how things have developed.

Progress along the tube has been pretty good considering most of the work has been carried out by just the two of us – quite a crawl to the dig face now. 3 hours.

## 12th February 2011

With Alex. Due to the restricted nature of the dig it was down to me to dig at the end, Alex at the pot hauling back the spoil. Once over the pinch point digging is just slightly more comfortable, although still need to drag spoil back to where I can fill the skip. Still a few more sessions before there is a clear indication of what is happening or which is the best route to follow, it's slow going at the moment. After nearly 1¾ hours of digging my shoulders were aching so I came back to the pot while Alex had a look at progress. I went up to 'Merlin's' and we tried an aural test, it seems that the dig face is directly below the point where the decorated section in 'Merlin's' begins. The strongest draught still seems to be in the upper level and it feels at least a degree cooler, it has also become damper. Finished digging in time to see England v Italy in the 6 Nations Rugby. 2¼ hours.

## 16th April 2011

With Alex, also Andy Farrant (BGS) and Chris Smith (University of Bristol)

Not too much digging was done, although I went to the end for a token scratch around. Most of the trip was centred on taking stal samples for uranium dating and discussing the geomorphology of Hallowe'en Rift, Wookey Hole catchment and Mendip in general. At least we may get some nice cut and polished lumps of stal out of it.

Alex wants to dig next weekend although I really want to get on with my archaeological dig at Whitcombe's Hole – I don't suppose one day will make a difference.

## 22<sup>nd</sup> May 2011

Alex has cried off again, so picked up Callum to see if we could manage to get anything done, and we did! I dug along the tube while Callum did the hauling. Next session will need to get some spoil cleared before digging.

The cows have caused some damage to the wall around the entrance. 11/4 hours.

## 4<sup>th</sup> June 2011

With Alex and Bob, with the three of us the clearing of spoil from the bottom of the pot was more effective. Spent 1½ hours at the bottom before shifting spoil back to the surface and some time was spent on wall maintenance, also dragged some dead branches across in an effort to keep out the cattle. 2½ hours.

#### 11<sup>th</sup> June 2011

With Callum. We set about digging more spoil from along the tube, after about an hour and ½ a dozen skips we headed out. Detour on the way down the hill to show Callum Badger Hole. About 2 hours overall.

#### 25th June 2011

With Alex. Carried on digging along the tube, concentrating on the left hand side. There's enough room to reverse up and work the other side now – there was a strong draught coming from the right which, on reflection, is possibly the best place to dig. We will need a clear out session next visit. 2½ hours.

## 2<sup>nd</sup> July 2011

With Alex. We spent the first hour or so clearing the spoil from the pot back to the bottom of the entrance. While Alex set to work with a hammer and chisel to enlarge the constriction I went up to take some photographs in 'Merlin's Magic Milk Parlour', to be uploaded to website later. Alex seemed fairly satisfied with his progress. 2½ hours.

## 9<sup>th</sup> July 2011

With Alex. After last week's clearance session it was back to digging at the end of the tube. I tried to reverse up the tube so that I could try digging from a different position but, for some reason I did not fit so managed to turn around and carried as usual. I tried to get over to the right hand side but it was very restricted and progress was pretty slow, so went back to the left hand tube and dug a couple of skips loads from there before getting into a more comfortable position that allowed some progress along the right hand side for a while. The right hand side is where the strong draught emanates from and so has to be the best way to go. Could do with some lightweight, but longer tools – Dutch hoe, or something like that. After 1¾ hours of restricted space digging my shoulders were aching so swapped places with Alex and his drill and he set about chiselling away at the rib of rock in the floor again for an hour or so. I sat in WC and got pretty cold, the air flow drying out my oversuit. 3 hours.

## 16th July 2011

Solo. I spent a good part of the morning at home sorting out a new hauling rope for the tube skip, knotted it so that it would be easier to grip when hauling, especially for Callum. Unfortunately when I asked Callum if he wanted to come to Hallowe'en Rift he declined so a solo trip it was. I had to cut the old dirty rope off the skip, good job I had thought to bring a

knife, soon had the fresh clean rope in place in place and set about digging. Earlier in the week I had made up a long handled trowel – with an aluminium handle to reduce weight and make handling easier and a stainless steel blade, very shiny. This turned out to be an effective tool and digging although constricted was quite successful. I managed to remove the remaining sediment from the roof revealing an air space beyond, what a draught! It's pretty constricted and some chemical persuasion will probably be required, the roof does appear to get higher in about a metre or so, the air space not only continues along the right hand side but can be seen in a more central position. It might also be worth persevering along the left hand side for a while longer to see if that develops further. Going back and forth along the tube was quite tiring and I could feel it in my shoulder by the end of the session. A good clearance session will be required when Alex is next on the hill. 1¾ hours.

## 23rd July 2011

With Alex and Callum. Spoil clearing session from WC. Alex went to the pot to clear the spoil from there; I was hauling from Stal Bend, while Callum made a sterling effort of dragging skips to the bottom of the entrance and emptying them. When spoil was clear Alex went up the tube to see the progress but didn't do any digging. We swapped around and I went to the end and scratched about, but didn't fill any skips. I did take some photographs for the website before we headed off. Callum was beginning to get a little cold but he did venture up the tube to see the end. 2 hours.

## 31st July 2011

Alex emailed on Friday to cancel Saturday's digging plans and I ended up carrying out some bike maintenance and going for a cycle around the lake via Chew Magna. I had hoped Roz and the kids might come over to Hallowe'en Rift but they already had other plans so another solo trip was on the cards. On the way up the hill met up with Rachel Clarke and stopped for a chinwag before continuing on up to the cave. At Hallowe'en Rift quickly went to the end and carried on digging along the left hand tube. Still can't be sure if there is a faint draught or some air movement from this side or not. It's not easy work digging solo but doable; filled four skips in about an hour before calling it a day and retiring to the Hunter's. 1½ hours.

## 6<sup>th</sup> August 2011

Some difficulty has arisen with the access agreement with Hallowe'en Rift so Alex had arranged a meeting with the farmer, Mr Lunnon, at Wookey Hole. I wasn't best pleased when I found out that Les Williams (CSCC, Access Officer) had somehow got involved but we managed to avoid him so was happier about that. We walked up to Hallowe'en Rift with the farmer, who was actually fine about us digging; he just wants a more secure entrance. We discussed some plans and came to an agreement that was acceptable to all involved. The only downside – no digging until the new entrance has been completed!

## 13th August 2011

I went up to Hallowe'en Rift with Alex to begin clearance around the old entrance ready for the construction of the new entrance. We had found some useful galvanised gratings at the Belfry which we quickly purloined. We dug out around the rift and decided to re-use the substantial iron beams that were already there and spent some time arranging the gratings until a suitable configuration was arrived at and a plan was formulated. After making the rift secure we left the site. Mr Lunnon has given us permission to park at the farm which means the walk up is slightly easier and shorter; he also is aware when we are digging.

## 27th August 2011

With Alex. I had purchased half a dozen bags of 'post-crete' at Travis Perkins on Friday costing about £50. We parked at the farm and we both decided to carry two bags of 'post-crete' in rucksacks up to Hallowe'en Rift (I later realised the bags were 20kg each rather than the 12½kg I had thought) – bad idea! 40kg of 'post-crete' plus water and tools was a struggle up the hill especially getting over the fences; I almost thought Alex was going to die! A second trip with one bag was far more sensible. We managed to quickly get on with construction and levelled up the beams and put the gratings in place. The 'post-crete' is very rapid setting which has its benefits, but there are also downsides. It might have been easier if Alex didn't keep dropping the level down the rift; there is a lot of muck to be cleared out when the entrance is completed. When we left the site the entrance was beginning to look very neat, we were well satisfied the day's progress. I will need to take the camera up to Hallowe'en Rift to take some photographs for the website.

## 3<sup>rd</sup> September 2011

With Alex, we were not so ambitious with the weight of the bags and made three trips up to Hallowe'en Rift from the farm. We got the majority of the base layer completed including the holding bar across the lid. All that's required now is some 'tarting up' and a tidy round and work out a way to lock the lid.

Rachel Clarke paid us a visit for a brief chat while out walking the dog.

I walked up to Hallowe'en Rift on 04/09/2011 and secured the entrance with an old spare bike lock.

## 10<sup>th</sup> September 2011

With Alex and another session on the entrance, we backed up the base layer with a couple of bags of 'post-mix' and mortared a number of capping stones into place. We started a bit of gardening around the entrance to tidy things up. We will bring up a couple more of the gratings to make hard standing areas and finish off the tidying; we also need to clean out the entrance shaft.

## 25th September 2011

Carried up another grating and tidied around the entrance. I was tempted to take another bag of 'post-mix' but didn't. On the next visit we need to erect the tripod and clear out the shaft ready to get back to digging.

## 1st October 2011

With Alex. After putting the final bag of 'post-mix' around the capping layer and erecting the tripod I actually managed to get underground. Completed the mission and cleared the debris from the shaft area so the next trip should be to continue the digging effort along the tube.

I must admit though that the new entrance looks really good. It's been a break of 2 months since the last digging trip, a solo effort on 31<sup>st</sup> July.



Alex working on the new entrance.

## 22<sup>nd</sup> October 2011

With Alex. Now that the entrance lid has been constructed and the spoil cleared away its back to digging. We removed the spoil from the base of WC back to the bottom of entrance shaft before I went along to the dig and carried on work along the left hand side of the tube until Alex wanted to call it a day. While waiting for Alex to clear the pot I scratched around an interesting lump stuck in the sediment which turned out to be a bone. After some initial research online it appears to be a phalange bone from a cave bear *Ursus speleaus* which was quite unexpected – not too sure about this and will need to follow it up.



After a non-productive trip to Cheddar Caves Museum pursuing the cave bear theory I visited Wells and Mendip Museum which resulted in the positive identification of the bone

uncovered in Hallowe'en Rift and it originates from the foreleg of *Bison priscus* (see image below).

Bison were present during the Pleistocene, during the mid-Pleistocene bovids appear to have adapted to cold northern climates. *Bison priscus* becomes extinct during the last glaciation, the Younger Dryas. During the Ice Ages of the Pleistocene epoch much of Europe was covered by glaciers, the remaining landscape steppes, *Bison priscus* lived on these grassy plains. The Quaternary Extinction Event gives a Northern Eurasian date of  $80,000 \rightarrow 10,000$  years ago for species such as Bison priscus along with mammoth, rhinoceros, cave bear, hyena, lion, etc.

Higham, T. 2006. AMS <sup>14</sup>C Dating of Ancient Bone using Ultrafiltration gives dates for *Bison priscus* bones recovered from Banwell Bone Cave as 52,700 ±1900 <sup>14</sup>C age BP to >59,000 <sup>14</sup>C age BP and for Hunters Lodge Inn Sink as >54,800 <sup>14</sup>C age BP.

## 29th October 2011

Solo digging trip. Carried on along the tube, filled a skip, and dragged it back reversing out of the tube and so on until all the dumping space had been filled up. The sediment is very dry at the moment. I didn't find any more bones suitable for any diagnosis but did find one tiny shard. First job next visit will be to clear spoil from the base of WC. ~2 hours.

#### 5<sup>th</sup> November 2011

With Alex. We cleared the spoil dumped at the base of Witches Cauldron and then continued digging at the end of the tube. I uncovered a small solution dome in the roof and there's also a lump of dolomitic conglomerate in the sediment, it's loose but not yet ready to be removed. ~2½ hours.

#### 12th November 2011

With Alex. Same as last week the first task was clearing the spoil from the base of Witches Cauldron – not so much this week so more time for digging. Continued to work along the left hand tube and quickly removed the loose boulder. We have what appears to be a cross-rift with quite a number of roots and angular cobbles seemingly coming down from above. There is also a change in the air, a slightly more organic odour, fresher and a draught is perceptible. The sediment coming from the left hand side is very dry and looser. Unfortunately, in an effort to get a better look I have worked over the top and the dig has become too constricted. I will need to go back up and dig out the floor and make more room for comfortable digging. Excellent session and I am very optimistic for the future. 2½ hours.

#### 19th November 2011

With Alex. Continuing the quest for passages measureless to mice! First job was to clear the spoil dumped at the base of the Witches Cauldron before returning to digging along the left-hand tube. The pot/rift edge noticed last session can be seen (*take a look at the photo taken on 20th and shown on the post for that day*) but some more forward progress still required before a 'good old prodding' is possible - might be a good idea to wear some goggles as crap falls into your face when lying on your back and waggling a bar around in an effort to dislodge a blockage above your head. There is certainly a change occurring bur more work still required. The dig has become a little squalid over the past week or so - the result of a strong drip, or lots of drips, obviously the surface above ground has become saturated and the water is permeating into the cave, emerged rather muddy, slightly knackered, but rather satisfied after a steady 2.5 hour session



The image above shows Alex working his way along the approach tube from the base of Witches Cauldron to the dig site - a fine spot!

#### 20th November 2011

Solo trip. Just a quick Sunday morning jaunt to take some photographs of the end dig in order to update the online gallery before retiring to the Hunter's Lodge Inn.

#### 26th November 2011

With Alex. Well, the original plan was to clear out all the dumped spoil back to surface, but someone forgot a spanner to erect the tripod - so continue digging was our only option. As usual we cleared the base of Witches Cauldron before I headed off for the tube. It seemed particularly sticky today like trying to cave through 'velcro', there is not enough space to free your oversuit from the clag and in the more snug spots it can be a little 'hard going'. Continued clearing the sediment at the end of the tube and did manage to get a better look at the rift but am still a little undecided about the best way to proceed - don't want to leave myself in a position where collapse of the sediment overhead might pose an inconvenience. Air movement was not as obvious during today's session.

#### 10th December 2011

Spoil clearance session with Alex. After getting changed at the farm and ready to go, we had to return to BEC HQ, The Belfry, to get the spanner that we had forgotten again! Eventually got up the hill to Hallowe'en Rift and set about putting up the tripod ready for hauling. Alex went down to the bottom of Witches Cauldron and cleared the spoil from there and I hauled and dragged the skips to the base of the entrance. It's become pretty mucky along the passage, but at least the skip is suitably lubricated and slides easily. We then set about clearing the spoil from the base of the entrance back to the surface; I did the hauling up the rift while Alex was at the bottom loading the skips. Lots of room for dumping the digging spoil now.



Alex emerges from Hallowe'en Rift after soaking up the puddles in his nice cotton 'blotting paper' overalls, damp and very muddy. I, on the other hand, was rather more comfortable in fleece suit and cordura caving oversuit.



My turn to be the 'mud monster' and soak up all the water, gets rather cool after a couple of hours. This kit was clean at the start of the session; note the 'natty' caving hat.

## 17th December 2011

After a chinwag with the farmer and his son we wandered up to Hallowe'en Rift in bright sunshine but a rather chill wind. The spoil was all cleared last weekend so straight into digging mode, I went to the end of the tube, Alex settled in at the base of Witches Cauldron. Very moist along the tube so decided to load spoil directly into the skip, nice drip into the ear. Continued to work under the rift and pulled out a number of small boulders which is interesting, these boulders appear to be mostly conglomerate although there is some calcite present. Need a slightly bigger bar that will be more effective in working the compacted sediments. Meanwhile, back at the Witches Cauldron, Alex was busying himself by digging out the base of the pot after hearing a trickle of water. Digging was ended when all the stacking space was filled, another clearing session next trip. Retired to the Hunter's Lodge

Inn for a pint and a cheese and pickle roll, in my opinion the greatest hostelry in the land - marvellous!

#### 30th December 2011



One of those typical Mendip winter days - grey, damp and the forecast is for it to be very damp. Following a conversation I'd had with the farmer on Christmas eve and a previous visit with the kids, before the digging session we ventured up to have a look at an interesting exposure of Triassic rocks - mostly of Dolomitic Conglomerate.

There are a number of interesting features that are worth looking at and a couple are depicted in the photographs above and below that might be evidence of some initial cave formation processes within Dolomitic Conglomerate. We will return to this area to carry out a field survey and comparison of strike/dip angles with those at Hallowe'en Rift area.

After our detour we decided to return to the prime objective - digging in Hallowe'en Rift, especially as the weather was closing in. Cleared out Witches Cauldron of last sessions digging spoil and that was enough, very claggy. I returned to the surface to emerge in some very low cloud, waited for quite some time for Alex to return. Alex had a bit of an 'epic' - at the bottom of Witches Cauldron where it is rather restricted for space Alex's foot had slipped into a narrow rift filled with 'gloop' and while we had been working away, his foot became stuck fast and had required a considerable effort and some contortion to extract it. He arrived at the surface rather relieved not to have sacrificed his wellington boot!