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# ULSA NEWSLETTER

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October 2020



## Editors Note:

Hello everyone, I will be taking over the compiling of the newsletter after a long hiatus. I feel as a club we might need this now more than ever. Although there has been a drop in activity as a club for obvious reasons, our members are still active underground. Because we can't meet in a pub to discuss our recent and past adventures hopefully this newsletter can help us feel a little more connected. Please contact me if you would like to contribute to the next edition, and a big thanks to all that contributed. – *Nadia Raeburn-Cherradi*

## Issue Summary:

This issue includes an update from LUUCaS; a freshers report from Amy Lam; a prospecting report from Mike Butcher; an update of Sam Allshorn's projects; a stay-cation holiday rant from Alice Shackley; Ian Peachey's adventures in textile design for cave rescue; and a recent bolt climbing trip rant from Rob Watson.

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## An Update from LUUCaS

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From LUUCaS President Ben Chaddock

This year for the caving club is one with a bit of a slow start, this isn't however due to lack of interest, current members and prospective members are all psyched up and ready to do some proper caving.

Unfortunately, as we are a Leeds University Union society and receive their funding, we must also comply with their regulations and administrative procedures. Due to COVID-19 these are either quite slow, or not in place as of yet and many of their staff remain on furlough. This is impacting running training at the edge, registering drivers to the union insurance, and getting activities such as day trips approved. Slowly pieces of our paperwork are being approved and there is hope for this term to still yield some great trips (pandemic providing).

In place of any freshers to introduce to the great underground many members are taking their time to improve their own individual caving skills by either going caving, practicing SRT whilst out in the garden or attending an extremely helpful leaders training weekend organised by Rob Watson and CHECC.

## South Wales caving trip on Chinese New Year

*"It was my fourth caving trip, and still the most unusual one"*

By: Amy Lam

For starter, it was calm. If you are in a University caving club, this word shouldn't be anywhere close to accurate. Usually people would be partying in the most bizarre way, such as three people on a horizontal ladder trying to flip through each other, or hooking canes onto ropes and climb across the room without touching the floor (which oddly resembles an art project). But that night when we arrived the hut at around 23:00 or 24:00, we ended up chatting in a circle by the fire, absorbed by the softness of the sofa. The hut was small and cozy. The only 'caving elements' were the narrowest staircase I have ever seen, and the fire exit being a rope hanging outside the window (Yep, my definition of 'caving style' is wonderfully weird stuff). The bed even has a pillow with it.

Secondly, the caves there were very different from the ones in the Yorkshire Dales. I had been looking forward to this trip, as I heard that the caves here were warm and dry (My two favorite adjectives). On the first day, we split into two groups and went down Ogof Agen Allwedd. It was quite a long trip—a lot of walking, squeezing and dodging bats. The Crystal Gallery was wonderful, Brenden decided to take a nap at a corner, Alice got really excited about a giant crack, and



Amy in OFD

Michael took a lot of photos with Mel using the helmet as photoflood lamp. It was true—the

cave was much warmer than usual with not much water in it, so despite the tiring long walk, it was quite comfortable and fun.

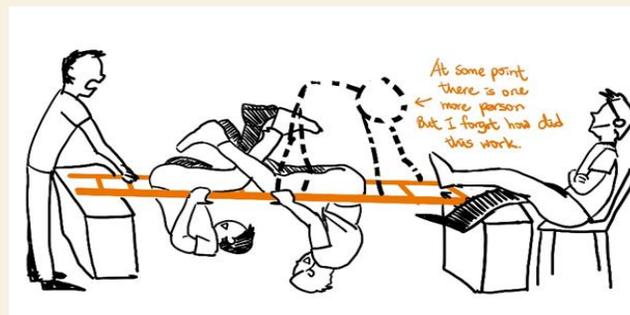
Most people decided to take a break on Sunday, so only Alice, Ben and myself went on a second trip: OFD. This cave was a mixture of everything. Rocky surfaces, great chambers, narrow streamways, beautiful stalactites and muddy crawl. My left hip was still hurting from yesterday walking, so I watched in awe when Alice and Ben effortlessly fly through the boulders. I too enjoyed the physical challenge—sometimes it felt like walking on the moon surface.

The day ended with a 5-hour drive back to Leeds with a stop at a Chinese takeaway. 'A little celebration of the faraway festival', I thought to myself.



Photo up: Lucy Gunning 'Climbing around my room', 1993 compared to Rob Watson drytooling with canes at Bull Pot Farm.

Down: Amy's depiction of a ladder travers



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## Prospecting in the Moughton Area

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*Healthy Bimble from the Helwith Bridge*

By: Mike Butcher

With clouds in Leeds and sun in the Dales, Alice Shackley and I knew where we'd rather be. Back in the beginning of January, while Alice was staying at the YSS for the Women's Weekend, the weather was entirely different. Storm Ciara had brought flooding to the Dales, causing a large stream to erupt from the limestone crag behind the back of the YSS. This is the Moughton area, essentially the south-eastern tip of Ingleborough, known for its various quarries and not a lot else. Intrigued by large ephemeral resurgence, and the otherwise lack of significant cave passage in the area, we went looking.

Parking by the YSS and walking past the Foredale cottages we spoke with one of the locals. His initially unwelcoming tone softened when I explained I wasn't a climber, and was a 'geologist from the University of Leeds'. I'd learnt that line from John Helm (CPC) when helping him smuggle galena from a mine in Shropshire. It does work well, and isn't technically a lie. The chap said they'd had a lot of trouble with climbers in the past. He explained the cave was Combs Cave, and served as the water source for the cottages. With his blessing we walked up the hill to have a look. The cave is just above the basal unconformity in the limestone. but the final climb up to the entrance was a ~5m high shear cliff, possibly traversable along a ledge from the right, although looking dodgy without protection. Not wanting to make a scene nor disturb their water supply we left it for the day and carried on up the hill. Northern Caves 2 does mention Combs Cave, as an 18m long 'roomy tunnel ends in a clay choke'. Could this have been washed open?

Atop the hill a few grassy depressions were noticed, but most interesting of all was an area with two fluted shafts only a few metres from each other (SD 79644 70169). These were both covered with rusty corrugated iron, and contained old sheep bones. Located in the centre of a large glacial bowl, they have the potential to drop into the streamway which may exist behind Combs Cave. Neither is particularly deep, but could be a nice location for a covid compliant dig. Particularly with the Helwith Bridge being walking distance and offering camping, which may prove very useful at a time when all huts are closed to guests. It would be worth enquired with the YSS lot if they know anything of these features before starting, I'd be surprised if they've gone unnoticed.

Onwards we walked past some more grassy depressions, trying but failing to find Amphitheatre Cave, then down past Moughton Whetstone Hole spring. Water here appears to appear from an overburden of soil, so not a viable dig site. Interest waned as the pub due closer, and it only seemed right to finish in the Helwith, sampling the ale and taste testing the steak. Can thoroughly recommend. Would make a fine base camp.



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## Sam Allshorn's Projects

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Have been climbing in the Eastern Front over several years. I have self-lined up the first 30m largely solo, a loose ledge was reached and Becka Lawson belayed this bit and help by throwing all the foot hold down the aven when she arrived at the top. This climb was followed to the left and headed towards North End Pot the climb finally ended in a narrow draughting rift that would require enlarging. Right at the ledge was attacked with Andy Wilson, here I bolted a traverse past a large poised block, resting on mud, to reach the foot of a loose gully. Andy was unleashed up the loose gully and place several dubious belays before reaching a ledge. I passed up the drilled and came up finding the rope tied to a bolt and rather dubious looking rock and Andy said I wasn't going to use the bolt the rock would have been enough for winter climbing! At this point we ran out of rope having gained about 25m. There is a good wall with 15-20m to go, needs a return visit.

Have installed anchors in Curtian Pot and Scanty Lardos the topos will follow as these are bits of other people's projects that I helped with so have left them to publish this info. Curtian Pot has also been dug in the sump. A Ireby pump with a flexible end has been used to suck silt and loose material out of the sump pool in Curtain but a gobal pandemic put pay to that, further work required here. With a trip with the original explorers we found a short oxbow that leads to the head of the aven below ledge pitch, this was entered about 1.5m up the wall straight ahead at the foot of the loose boulder climb before the traverse round to the 5th pitch. The pitch wasn't descended as it was all loose and nasty but a visual and vocal connection was established. Scanty Lardos has an interesting looking choke at the end where a concerted effort would give good returns.

Also had a fine trip in Keld Beck Cave above Dent and has on going leads. A cold trip and long carry to a very muddy unpleasant sump that hadn't been dived in Dale Head Pot, it was too filthy for words more a plopping sound as great sods of mud slipped off the narrow walls in the 10m deep pool in a narrow rift



**Robinson Pot Team**

occupied by a diver trying to kit up whilst not being struck down by the mud of loose rock as it peeled away as the third person squeezed past it, bringing the tins of air! Went back for another trip and the entrance looked to only be passable in one direction or for fish.

A trip with three BPC members with a permit saw one of the thunderbirds lay ~100m of new diving line in the sump to the left of downstream sump in Robinson Pot. I think the most important aspect of helping the diver was in my choice of the large pink weight to attach to his harness. Whilst initially he resisted the idea I explained that it would help to ensure that he could continue to be a thunderbird of the greatest appeal, with a broad and diverse following, he quickly saw sense and scuttled into the sump. On the return same diver was found with grin and empty line reel complaining that it hadn't gone into air filled passage but there were four on going leads... Some people are never happy.

I have also noticed that anchors can be used for measuring underground erosion rates where they are in a flow of water. Large pitch in Dale Head it is also happening to one of the traverse anchors in Ireby above Bell Pitch. The anchors appear to be coming out but assuming they have never been pulled they aren't and the rock around them is eroding at a rate of ~1mm/year. This is most evident in Dale Head where most of the spits are now largely visible as the edge of the spit has provided an erosion surface.

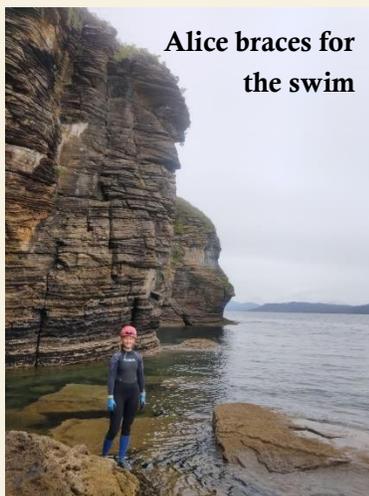
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## Spar Cave at High Tide

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By: Alice Shackley

Having never been to Scotland in summer, I got my first taste of the joy of the local wildlife on the Isle of Skye on August 26th 2020. I was bitten to shreds by midges. Mike and I visited the Island for 5 days at the end of August to enjoy a staycation, wild camping and driving about to see the scenery. On this grey Thursday morning we packed up the tent without first liberally applying skin so soft and I felt the aftermath of my reckless behaviour. Thankfully the day improved as we decided to visit what has probably been Scotland's most visited cave of 2020, Spar cave (near Elgol).



**Alice braces for the swim**

Being the prepared bunch we are, we hadn't read anything about it until we rocked up and after bush bashing our way through a field or two of ferns, we found out that access was only possible at low tide. The cave is situated in a very small cove with high cliffs (~25m) meaning access was best walked from the neighbouring small cove. Of course, we were greeted by high tide, but we were surprisingly undeterred. Packed in the car were two wetsuits, mine still with tags. So we walked back up the hill to the car and brought the kit back down to the waterfront. There was a slight, intermittent breeze that seemed to keep the midges at bay but nonetheless I certainly didn't dally in changing into the wetsuit. We had been lucky so far that it had only rained on one occasion during the trip and although it was completely overcast on this day, it wasn't freezingly cold. The water however, was not a comfortable temperature.

Mike was such a gentlemen and let me go first whilst he fuffed around with his phone camera. I did my usual balancing act, fretting and trying to stay on rocks as much as possible. Inevitably I did eventually have to just plunge in and all who know me will be able to guess how much I enjoyed the cold water. The cave is formed by sea erosion but the rock is calcareous sandstone so it's possible for calcite to form. The entrance is fairly tall, about 5m and shows two possible ways on. I went first into the right hand passage and after letting Mike know he should definitely follow through the shin deep mud, discovered an end only another 10m in. It was a wonderful small muddy, uninspiring crawl which ended rather abruptly.

Mike thanked me and we walked out together and onto the second passage. This was actually less muddy and the natural light showed the decent size of the passage. Around a corner we needed lights on and soon came to a flowstone slope. It went up a fair way but wasn't difficult to climb as it was very grippy. We were treated to some very nice calcite in the chamber beyond and as Mike's phone is waterproof we tried for a casual bit of cave photography. The description says the cave ends here overlooking a crystal

clear blue pool but we could see the passage continuing onwards across the water. So we moved across in our wetsuits to find the passage became drier again and lead downwards to a bouldery, silty, muddy end. Of course Mike pushed on through the flat out crawling but when he reported back that we should suggest this be ULSA's next dig I decided it wasn't worth following.

Mike backed out of the crawl and then noticed some interesting colouration and unusual material dripping down the walls. We spent a little time looking at this and photographed it for your entertainment. Sadly this ended the exploration on our trip so we turned around and headed back. The pool was less pretty now but back at the top of the flowstone was a treat. As we stepped through the puddles at the top the water cascaded over the edges of the goure pools and the ripples reflected our lights as they moved over the flowstone. Very shimmery. I liked it. We attempted more photos but it seems Mike's phone isn't fully waterproof as everything was coming out foggy from steam inside the camera.



Back on the shore I changed out of the cold clothes quickly but Mike decided this was a great opportunity for a refreshing sea bath. Stripped naked he was just applying soap as the sound of engines started to get louder. Not two minutes later there were some speed boats pulling up with tourists to look at the cave from the water. Sadly they were only treated to Mike shirtless as he made a close escape. They must have thought we were crazy to have taken a dip in the Scottish seas. All in all a decent bit of pretties to make it worthwhile. Would recommend for a nimble.

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## Hot or Not: Developing an agile lightweight system for managing environmental exposure in cave rescues

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By: Ian Peachey

One of the biggest challenges in the aftermath of any serious accident underground is keeping the casualty warm. The effects of shock and becoming immobile in a cold and wet environment rapidly leads to hypothermia which can seriously complicate traumatic injury as well as being a killer in its own right.

It is very hard to “re-warm” a casualty who has become seriously hypothermic underground. The principle problem being that the heat fluxes required to rewarm the volume of material that forms a human body are large and hard to achieve without causing tissue damage or unintended consequences as the body is not functioning correctly. For example, heat pack warming through the skin can cause low temperature burns because the skin is deprived of blood, reducing the effect of the heat pack in warming the casualty’s core and meaning that heat packs must not be too hot or they may do more harm than good. Hot drinks are again very useful in preventing and limiting hypothermia but the amount of hot fluid the casualty would have to consume to “reverse” severe hypothermia would probably lead to them drowning. The hospital treatment for severe hypothermia is called ECMO therapy and involves the casualty’s blood being put through a warming machine, this is obviously not practical in the cave environment!

Working on the basis that our casualties body temperature is a finite resource, we need to get them effectively insulated as rapidly as possible. From a normal cavers perspective this is why carrying equipment such as a group shelter, survival bag, balaclava etc. with you is so important, because it can be used immediately before the casualty has lost warmth. From a cave rescue perspective, we need equipment that is not only warm but as light and easy to carry as possible so that it reaches the casualty quickly. There is no point applying a bandage once the bloods all gone, in the same way insulation needs to be applied before the heat is all gone!

As it stands the usual first step in a cave rescue is to send in a ~4 person “fast and light” team. They will typically carry: A group shelter, first aid kit, cave link set (a text based communication system that sends messages from underground to surface), chemical heat pack, hot drinks and food, a short rope and basic rigging equipment to assist with extraction if the casualty is movable.

The casualty bag is an insulated bag which we put an injured caver in. You will note it is not in the above list of equipment typically sent in with the first response team. There are two reasons for this:

1: They are heavy and bulky.

2: Teams don't generally have many casualty bags available to deploy so it would be unfortunate if the casualty is not where they are supposed to be, and the bag ends up in the wrong place. For this reason it is often not sent underground until the initial party has confirmed the location of the injured caver via cave link.



Amongst Dales teams we currently have two options when it comes to casualty bags. Either a Neoprene bag which is effective in very aquatic caves but does not provide the most effective insulation possible in many settings, or a fibre pile mountain rescue casualty bag which are warm and are still effective when wet but they are bulky and heavy especially when wet. In reality the neoprene bag is almost always used in any rescue due to it being easier to carry.

Cave rescue is a very niche activity and serious callouts are thankfully quite a rare event, however this means that there is very little incentive for commercial companies to develop specialist equipment specifically for cave rescue teams. Most of the commercially produced specialist equipment we have has cross over with mountain, industrial or military rescue applications to make development and production viable. I made quite a few attempts at persuading various commercial companies to design and manufacture a specialised casualty bag for cave rescue use but when you announce that there's probably only demand for 10-20 of them they tend to lose interest and when Covid arrived all remaining interest disappeared. It soon became clear that if I wanted a new design of casualty bag any time soon I was going to have to start doing it myself.

There were quite a few obstacles to overcome in achieving this: I didn't know how to sew, I didn't know how to design equipment and I didn't know where to get technical fabrics. Fortunately my partner Rachel is very capable with a sewing machine and agreed to teach me, so that solved the first problem. I found a German website [extremtextil https://www.extremtextil.de/en/](https://www.extremtextil.de/en/) which supplies technical fabrics and all

manner of other useful bits and bobs. (Shipping is expensive - 20 euro, so its worth making sure you buy everything you want in one hit!) And I had a think about designs (this took a while). I was informed that handling the large amounts of fabric required to make a casualty bag as a first sewing project was a recipe for a terrible time. This led me to thinking about the fact that we didn't have any really good kit for dealing with cold casualties who were still mobile and able to cave out on their own two feet, so I decided to start by designing a jacket for the walking wounded.



Initially working with some relatively expensive (14euro a meter) 3 layer laminate waterproof fabric and 130gsm Climashield apex insulation, I made up the above jacket. It goes on over the head, the neck is large enough that you can get it on over a helmet, the front panel has two wings which wrap around to the back (top piece in photograph) and Velcro down. This open sided design allows the jacket to be put on around broken arms and means you can fit it around even the widest of individuals. The idea is that this jacket is used like a belay jacket, put on over the top of

the cavers oversuit, it has waterproof face and lining fabric, so water won't migrate from the cavers oversuit into the jackets insulation.

Cave rescues are always a bit of a cluster f\*ck to some extent. Communication is very limited and sometimes the task you go underground expecting to carry out is not what you end up doing - you may enter the cave thinking you are carrying out a quick search task and 5 hours later you are still sat on a comms point operating a cave link set, freezing your arse off. Part of the logic behind this jacket is that it can be worn by a rescue team member without compromising its ability to be used by a casualty or other team member later. We can carry very little underground, the large rucksack is not an option for tight potholes so our equipment needs to be as flexible as possible. The group shelter was a huge improvement on the survival bag because people don't use survival bags unless they think they're going to die of the cold, they are seen as one shot wonders that are only for use "in an emergency", often people don't realise they are in an emergency situation until it is too late! On the other hand they will use a group shelter a lot sooner knowing they can just repack it and carry on, thus averting an emergency before it's happened. The same idea applies to this jacket compared to the chemical heat packs that have historically been carried during searches for missing groups. A cave rescuer will be very reluctant to use a chemical heat pack themselves because once its gone it's gone and can't then be used by the casualty even if that rescuer has found themselves in a situation where they themselves are getting cold. This jacket can be used, packed away and used again (it lacks the active heating aspect of the heat pack but we will get back to that!)

At this point I was introduced to Beth Knight who is a member of DCRO. Running a small gear repair/manufacturing company (<https://bethknightcrafts.co.uk/>), Beth is really capable with a sewing machine so I showed her my jacket design and she made some improvements to it. The MK2 uses a heavy duty nylon similar to that of an AV over suit as the outer fabric so that it can be caved in confidently without getting ripped, it has a patch pocket to the front and a waist belt to back up the Velcro wings.



Having had some sewing practice with the jacket, it was now time to get back to the bag. I had been doing some research into previous designs of cas bags and had contacted Aiguille Alpine who manufacture most of the casualty bags used by surface mountain rescue teams. They also produced the last British Cave Rescue Council (BCRC) casualty bag. They invited me up for a chat and showed me a few of their bags. Aiguille produce a lightweight casualty bag (<https://www.aiguillealpine.co.uk/product/rescue-industrial/casualty-bags-vacuum-mattress/mountain-rescue-lightweight-casualty-bag/>) that is essentially a wrap with  $\frac{3}{4}$  length fibre pile insulation that would extend to just below the knee on most people. The bag has a hood and a draw string to gather the fabric together at the foot end. I decided this style of bag was the way forward for cave use - it's simple, light, very adaptable and can be bodged around larger cavers/bulky splints were as with standard sleeping bag style designs, if you don't fit, you don't fit!

Fibre pile has a lot of excellent properties for use in casualty bags: it's very warm, wicks water away from the casualty and resists compression so it provides a good level of insulation under the casualty as well as over the top. However, because it resists compression fibre pile bags are bulky and it's also quite a heavy material. I decided to use the same 130gsm climashield insulation I used for the jacket in the cas bag as it's extremely light, compressible and holds almost no water after immersion (it is very similar to primaloft but a lot easier to source).

I used a 6oz PU coated nylon for the outer shell and thin 2oz PU coated nylon for the lining fabric. The insulation is  $\frac{3}{4}$  length and for the initial prototype I have not added a hood (I intend to design a detachable hood however with headblocks and helmet, hoods often seem to mostly get in the way). I also added two 30cm waterproof zips to allow the casualty to be packaged with their arms out to assist with their own rescue where possible. The bag is sized so that the spine board of a slix stretcher or a low profile vacuum

mattress can be brought inside the cas bag. Four G clips are used to draw the bag together with a Velcro closure at the chin and draw cord to the foot end. There is a baffle across the inner top panel of the bag. The new bag weighs in at 1.2kg as compared to 3kg for the previous BCRC fibre pile/flectalon cas bag.



Whilst working on the casualty bag I was also investigating electrical heat pack technology. Li/ion batteries and flexible carbon filaments have brought this technology on a long way. The chemical heat packs currently in use have several major drawbacks:

- 1: Once you activate them they will get as hot as they get - you cannot control their temperature and they can get very hot. As mentioned earlier this creates a risk of burns to the casualty.
- 2: The chemical reaction in the heat pack requires oxygen, if placed within multiple layers of insulation, the restricted oxygen supply can inhibit the reaction.

3: Once used, the cas bag must be opened up in order to remove the pack and insert a new one, losing warmth.

4: They cannot be turned off and on. Once they are activated they run until exhausted so a team member could not activate a pack for an hour, turn it off when transitioning into an active role and then turn it back on if stopping again or handing to casualty

Electrical heat packs address all these issues. They regulate their temperature output so a safe level of heat can be applied. They don't require oxygen to work. The battery can be kept out of the cas bag, once used a new battery is attached, there is no need to unpackage the casualty, the pack can be turned off and the battery saved between uses. I sourced a heat pack system from a company called Alpenheat <https://alpenheat.com/en/products/heated-clothing/heating-element-fire-doityourself-aj5/>. The Alpenheat packs last between 2.5-7.5hrs per battery depending on setting, the element is flexible and can be sewn into clothing, and machine washed up to 30 degrees.

I carried out a field test of the new bag in Dowbergill, immersing myself in the streamway beneath gypsum traverse until shivering uncontrollably. I then climbed up into gypsum traverse where Rich Hudson and Adrian Hall packaged me into the bag with a heat pack before heading off for a trip into the cave. It took approximately 20mins for uncontrolled shivering to stop, after 50 mins I was continuing to warm rather than cool, Rich and Adrian returned and the tested ended.

Put together, the jacket, casualty bag and electrical heat packs provide a highly adaptable system that allows us to improve the safety of team members and improve the likely outcomes for seriously injured cavers. I hope that with the reduction in size and weight of this new casualty bag, in incidents where the casualty's location and condition is known the cas bag will now be able to form part of the first response teams equipment, with the jacket used where there is limited information.

The project has been adopted by the British Cave Rescue Council and further development work continues with a focus on draft exclusion in the casualty bag and trialling some alternative shell fabrics. A MK3 walking wounded jacket with an integrated heating element and collar is also in development.

Thanks for collaboration, support and advice so far to Beth Knight, Aiguille Alpine, PHD designs, Ann Barber, Rachel Mclaughlin, Brendan Sloan and Jim Davis.

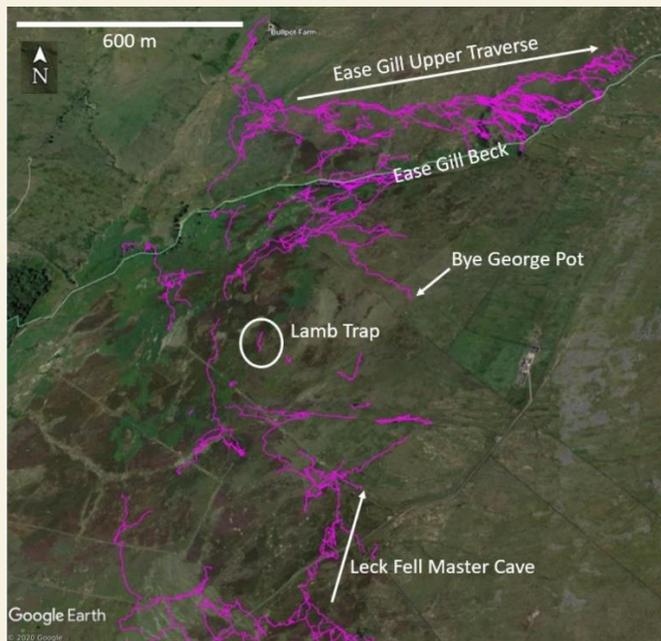
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## Peachey definitely didn't take a day off to go exploring and then accidentally inform his boss...

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By: Rob Watson

A couple of years ago before I moved abroad to Ireland and then Austria, Richard Bendall and his friends in the Misty Mountains Mud Mining Corporation were kind enough to let us recent graduates join them in pulling mud and rocks out of a hole on Leck Fell near Meridian Pot (imaginatively named 'Not Meridian Pot'). The aim of digging in this area is to try and discover a dry link between Pippikin and the Leck Fell system. Interest in this dig dwindled after a very squalid sump was encountered at the bottom of the pitches, and we all moved on to doing other things.



(see video on [YouTube](#)).

Richard however, being stubborn, refused to give up on the dream and found several new apparent dead-ends to turn into potholes, the most recent being one called Lamb Trap which is bang in the middle of the fell between the two systems (see map). After 18 months of steady progress, the major breakthrough occurred on Sunday 4th October when Si Cornhill and Di Arthurs found a hole in the wall of a pitch and enlarged it enough to pop through into major passage. Fortunately, I was caving in Lost Johns with students on the day and happened to bump into Richard at the car park. Gracious man that he is, he offered to have us look at the finds thus far, and later that evening sent me an email detailing the finds.

The Enthusiometer was by this time fully off the scale and I asked if I could have a look at the bolt climb up the parallel aven to the new shaft. Richard and friends kindly agreed and I recruited Peachey to come along that Thursday. Mike also expressed interest and agreed to drive us up in the Saab.

Underground at around 3pm and the cave greatly surpassed expectations: we were expecting a grovelly mined-out scumpit for the duration until the window pitch but in fact a substantial amount of quite pleasant natural pothole exists between the entrance and the mined out crawl, which is an impressive feat of perseverance. Many of the diggers live locally and are seriously committed, meaning a minimum of a trip per day every day of the week! So by the time we rocked up quite a bit of the vertical distance needed to be covered had been cut out by Ian Lawton bolting a traverse from the pitch-head on Tuesday evening. After arriving at the bottom of the window pitch I kitted up for climbing with Peachey on belay and Mike whistling tunelessly below. The rock at the top of the up rope left by Ian was reassuringly solid and I made reasonably quick progress to around 8 m up where I could see a passage of apparently substantial proportions heading off. Exciting!

The traverse across to get to the passage was muddy, chossy and generally quite unpleasant. right at the end, about 5 m runout from my last bolt, I stepped on what I thought was solid rock but in fact turned out to be a tiny boulder encased in a lot of mud. This promptly gave way and thudded downwards (you have to test Peachey is awake occasionally), but I luckily managed to wedge myself into the meandering channel thus preventing a rather large swing. Slithered gingerly up to reassuringly solid rock in the meander above and set about rigging a solid anchor for the down-rope. This done Peachey and Mike headed up to join me and then along the meander for around 15 m, past some quite nice formations, to reach a chossy hole into the floor of a further aven carrying a stream from above. Looked like a further climb of around 15 - 20 m in good rock will be required to see where the water goes. Mike could hear Peachey and I

discussing stuff in the bottom of this aven from the bottom of the window pitch, and Peachey and I could see what appeared to be some drill bits sticking out of the wall in the meander around 15 m above us, so this may connect into the rest of the cave but it's hard to tell exactly where.

Re-rigged the pitch, adding an extra bolt and a deviation. All rigged on stainless as requested. Then Dave Ottewell and Pete Hall showed up to blow things up very loudly. We spent around an hour moving some large rocks out of the crawl and down the pitch before heading back to the surface at 8 pm. Out at half 8, changed by 9, home before 11 after stopping en route to assist a man lying down in the road (nervous breakdown rather than injury). A great trip. Huge thanks to Richard et al for so graciously letting us come and join the party.

A trip of such unexpected success (because how many bolt climbs in caves actually go anywhere?) could not pass without some form of mishap, however. In my email report to the diggers the next day, I failed to notice that Russ (Peachey's boss) was in fact on the mailing list... And thus inadvertently got Peachey caught red-handed on the skive. Whoops! Upward progress has since been continued by Dave's Ottewell and Hetherington to within 15 m or so of the surface... second entrance?

