

**Pythagoras pitch, -800m underground**

“I can’t do this.”

“You don’t have much f\*\*\*ing choice.”

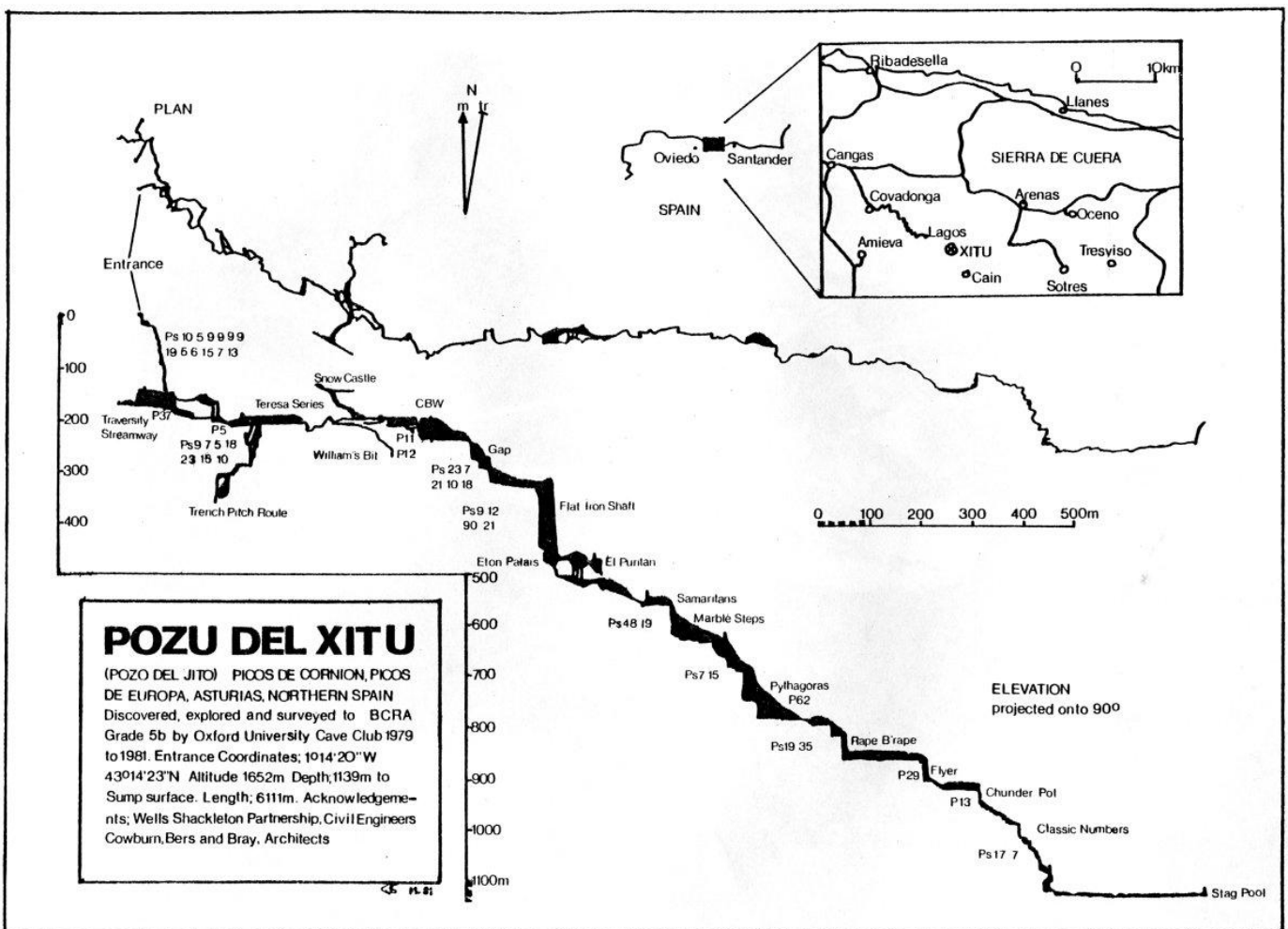
“Maybe someone could carry me out.”

“You better be dead or paralysed before that happens.”

“Please, I can’t do this anymore.”

“Man up. You’re getting out of here and under your own steam so get a move on.”

I was 800m underground, in Pozu del Xitu, one of the deepest caves in the world, hours from the surface, hours even from our underground camp, and I was having the worst sugar crash of my life. Dangling on a rope with an endless sloping boulder pile below me and a ceiling less pitch above, I finished arguing with myself and started to cry.



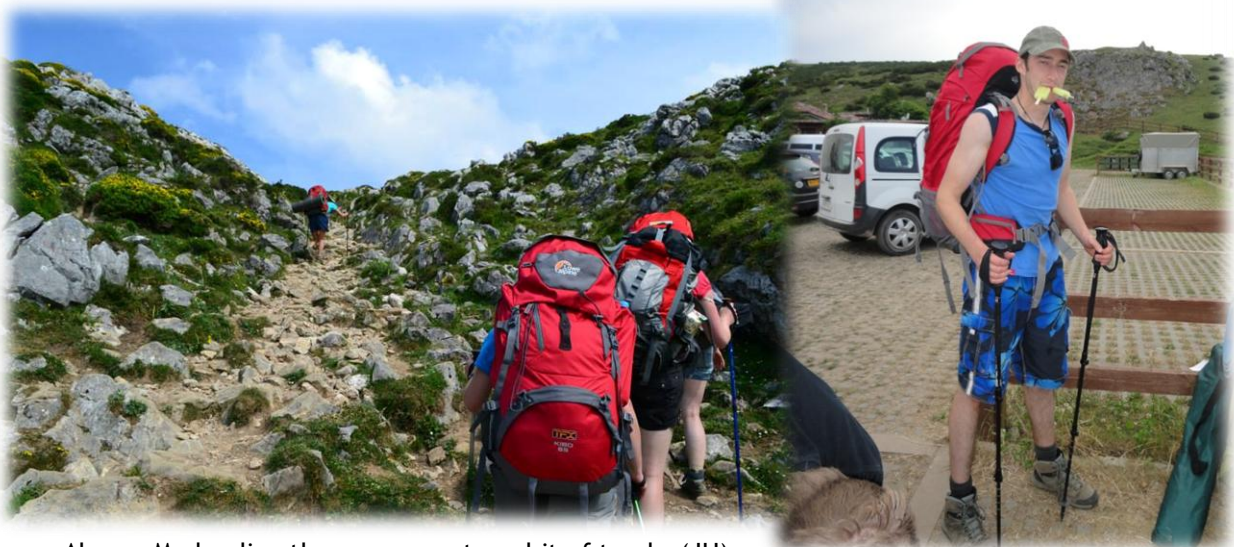
Survey of Pozu Del Xitu, the cave OUCC has been re-exploring for the last three years.

## The day before - on the surface

“Let’s get going! If we can get down to camp in three or four hours, we’ll be there before the others get back from pushing and can steal the inside sleeping spaces.”

Thus motivated, Jeff, Jack and I headed across the Ario bowl, caving gear slung over our shoulders, towards the entrance to Xitu. We were going underground for the next three days, the first day to descend to camp and spend the night, the second day to do a pushing trip down the lower reaches of the cave, the third to haul our asses back out.

Jack and I had only been on the mountain about a week, after a group of us flew into Asturias airport then made the cross country trek on four buses to Los Lagos, where roads end and torturous track began. After carrying our caving gear, clothes, and anything else we’d brought to survive the next few weeks, up this three hour rocky hike to the Refugio, we’d done the same trek again for the next two days, bringing up food supplies and extra caving gear that was needed at camp as the expedition kicked off.



Above: Me leading the way up a steep bit of track. (JH)

Right: Jack enjoying the rare luxury of an ice lolly, or two, before heading up the mountain. (VL)

I’d been to the Picos in 2011, also to explore Xitu, and so with some minor diversions, managed to lead the group I was with, a mixture of Oxford cavers and Irish students recruited by Steph the expedition leader, up the trail.

Settling into expedition life had been a fun readjustment. No phones, no internet, no showers or bathrooms. Everything that you ate, used or wanted was painstakingly lugged up, and all rubbish, gear and waste had to be carried back down too. Cleanliness was a distant dream, as was any meal that didn’t involve beans, rice, pasta, and tomato. We were lucky enough to stay in the Refugio each night, although we mostly stayed outside to cook, sort gear, and plan trips. Cows, chickens, donkeys and even a cheese-stealing dog (it’s a long story), all ran amok and the too frequent sight of a filthy caver stripping off behind a rock became sadly normal.

My first trip had been an acclimatisation one, taking me and Jack, who was on his first expedition, down to Flat Iron and back out to leave some gear for underground camp. We’d scrambled around happily, getting inevitably lost as I was the one leading, but

managing the challenging entrance rift, fiddly entrance pitch series, and long, complicated, horizontal sections without too much trouble. On the way out we amused ourselves (and I use the term loosely) by guessing what the blobs of carbide on the walls, left by cavers in the 80s to show the way, could be. One racoon eating a strawberry, constipated squirrel, and dinosaur sitting on a pi (the mathematical shape, not the food) later, we regained the surface, eager for the chance to get back down and do some real exploration.

Getting underground is no small undertaking. It takes a long time to sit around, planning, then procrastinating in the sun. Further time is then required for “faff” that all-encompassing activity which may involve but which is not limited to: finding your gear, putting it down, wandering around a bit, wondering where you left your gear, stopping for some lunch, rediscovering your gear, getting half changed into caving kit, dropping one sock, looking at the survey, packing your bag, writing in the log book, leaving, returning, searching for lost sock, leaving again, returning for other miscellaneous gear.



Left: Me faffing before a trip. (RH)

Below: Cavers faffing at the entrance to Xitu. (JW)



By the time we had completed this ritual, Jeff, Jack and I were eager to be off and, after a condensed version of faff at the entrance, finally got into Xitu. We wrangled our way through the entrance series which, with some imaginative rigging, required nothing short of gymnastics to traverse. We stomped through the narrow streamway, rubbing up against the walls with shoulders and bags as we passed the racoon, squirrel and dinosaur. We clambered along the Teresa Series, stopping to crawl, bridge, and climb, following the luminous strings tied at each junction to show the way. But just as we were nearing camp, having slid down five or six larger pitches before the main shaft of Flat Iron, we hit a small snag. Jeff and I, at the bottom of the 120m pitch, began to wonder what Jack was getting up to high above us.

I peered up, “Do you reckon he’s OK? He’s taking a while up there.”

“It’s the first time he’s done Flat Iron and there’s a lot of rebelay, he’ll be down in a bit.”

\*clunk\*

Jeff cocked his head, “That sounded metallic...”

“Oh dear.”

“JAAACK...AAAARE...YOOOU...OOOO...KA AAAY..?” (Flat Iron is an absolutely massive avon so communicating over long distances requires a lot of patience, decent lungs, and the ability to interpret garbled echoes. Even more so when the person you’re with has a strong Irish accent that you only just learnt to decipher yesterday.)

From high above, “IIDRRPPEDMMJMMMRR”

“He what?” I asked, confusedly.

Jeff considered. “Well that wasn’t a scream or panicky shouts for help so he’s probably fine.”

I decided to give it a go, “JAAAAACK... WHAAAAT’S...GOOOOING...OOOOON?”

“III...DRRRPPED...MMMM...JMMMRRR”

Comprehension dawned, for Jeff at least. “I think he’s lost his ascender on the ledge above Pregnancy Pitch, I’ll shimmy up to see if I can find it.”

So Jeff bounced off up the 40m bottom hang, his light bounding up the darkness as Jack’s made its way down in erratic bursts. I sat at the bottom and made a cairn with three spikes because I figured the single spike ones must get lonely. I watched Jeff’s light pass the rebelay at the top of the pitch, then detach from the wall to wander across the ledge, flashing in and out of view as it swung back and forth. After a while, the light paused, focussed on the floor of the ledge, then turned back the way it came, picking its way over the bouldery mass and sliding down the long pitch. It came towards me and materialised into a grinning Jeff, triumphantly holding up a handled ascender. Jack followed soon after only to have no explanation as to how his ascender detached from his SRT kit and fell 40m down a pitch. It also, miraculously, managed to survive the fall, only bending slightly in the handle, which makes it both the luckiest and unluckiest hand jammer alive.

Small dramas aside, we reached camp to find it deserted but for a mound of washing up, which we (by which I mean Jeff) dutifully did before we settled in for some food.



Looking up at Flat Iron as cavers progress down. (JW)

Eating down at underground camp is a dangerous and creative experience. The first major hurdle is lighting the stove, which can be both perilous and frustrating, particularly when said stove is balanced on an uneven rock inside a tent made of a parachute, and surrounded by spilt petrol from previous stove lighting attempts. After some impressive pyrotechnics however, we had fire, and a pan of water perched precariously atop it. The creativity of the affair then came with trying to mix and match as many instant meals/instant soups/beanfeasts/instant packets of anything, as possible into a single pan, in such a way as to be edible, filling, nutritious and tasty. Bear in mind many of the packets required milk and butter (for which we substituted a random amount of squirry condensed milk), precise quantities of water (for which we substituted as much water as would fit in the pan with the ingredients), and constant stirring (for which we substituted the occasional poke with a mangled spork). Needless to say, our meal tended more towards the edible and less towards the tasty.



A caver's concoction at underground camp. (JW)



Underground camp with parachute tent and much much gear. (JW)

As we finished up our seafood pasta/chicken soup/instant mash amalgamation we heard the unmistakable thuds and giggles of a returning party. A sopping wet Steph flopped into the tent (it's underground so the shelter is for warmth rather than protection from the elements), and announced she and Gaelan had found a lead. After following an inlet of water around the Flyer, they found an ongoing route that just went up and up and up into the rift for about half an hour's hard climbing, culminating in a very small wet squeeze that popped into a large undiscovered avon. There's no way to describe the buzz you can get from finding something new. Especially something new that looks likely to continue. On Steph, the buzz looked something like euphoria, hysteria, and a touch of madness (though that may have been an existing condition). Whatever it was, it had kept her perky through a serious dousing in the wet squeeze, up the long pitches from the Flyer to camp, and through yet more wetness at the Marble Steps, so it must have felt pretty good.

In short order, our minds were made up that the next day, Jeff, Jack and I would head down there ourselves to assess the lead, rig a handline for the climb if necessary, and push the squeeze to see if the avon above was scalable or if it required bolt climbing.

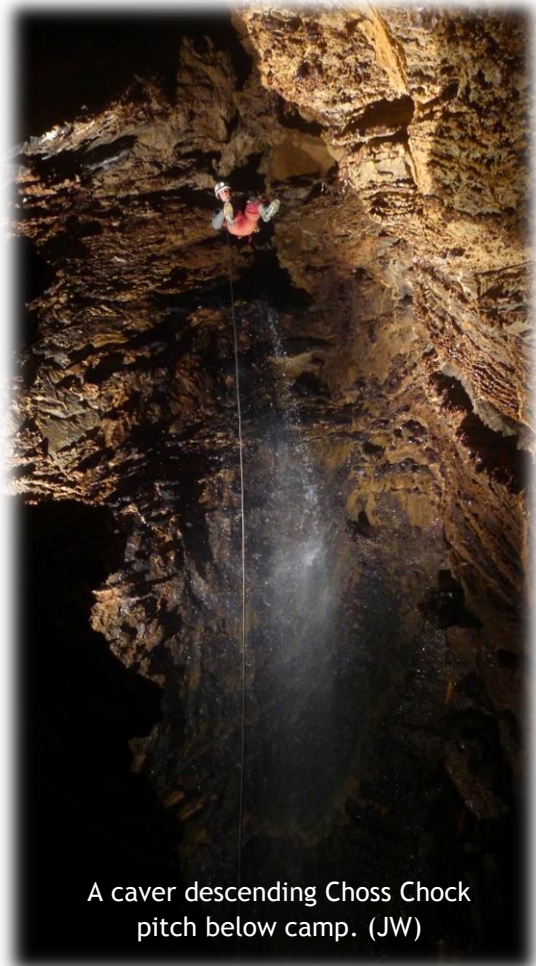
Shenanigans ensued at underground camp as more and more cavers returned from trips deep in the cave, attempted to light the stove and mix dinner, and get dry and warm in the somewhat inhospitable conditions. Lacking the usual avenues of entertainment, we amused ourselves by singing Disney songs and Irish folk tunes (badly), piling ourselves into one large mound of bodies in an effort to conserve heat, and searching at various points for lost socks, sporks, batteries, wellies, headtorches, etc.

The next day, feeling more squashed than really rested, the three of us left camp for the new lead, named by Steph in Irish as, “The Way of the Fairies” because of its flighty upward nature. I hadn’t eaten much for breakfast, partly because I don’t have a huge appetite normally, and partly because what appetite I did have was discouraged by the food on offer. After over a week on the mountain, my cravings for more solid food were starting to emerge. We also had caving snack foods packed, chocolate bars, raw jelly, trail mix, a can of tuna, but again, on the trip I didn’t have much to eat because I tend not to get too hungry in caves. I’ve done eight or nine hour trips without needing more than a chocolate bar or two and never felt short on energy, so I didn’t really worry about eating little. With hindsight, that was a big mistake.

The way down from camp was fun but passed quickly as we zoomed down pitch after pitch, some of them pretty long, but none of them any trouble when all you were doing was getting on a rope and abseiling away. I’d only been below camp once before, in 2011, and at the time had been more concerned about flood risks on the way up, so had probably forgotten just how far and tiring the reverse journey could be.

By the time we got to the area above the Flyer we were all eager to get exploring. Walking along the bottom of a tall rift before the pitch head, we picked our way over the damp floor, keeping an eye on the occasional drips or trickles of water coming in from high above or slithering down the walls. On the left, just before the Flyer itself, there came in a significant stream, with a steady flow of water coming down the wall from behind a protruding boulder. A tacklebag and a note left by Steph and Gaelan the previous day confirmed this was the mysterious climb they’d done, although from the main route, it didn’t look like much, disappearing out of sight not three metres up.

Still, with mounting excitement, we dropped our bags of excess rigging and bolting gear at the bottom of the rift and started to climb. By following the path of the icy water and clambering underneath and behind a large boulder, we found a slippery scramble up that gave access to the higher, and much taller, part of the hading rift. The darkness overhead beckoned and the route up was traversable, unlike the other steep walls that were all that could be seen from below.



A caver descending Choss Chock pitch below camp. (JW)

Seeing the way on, Jeff began rigging a handline for the more treacherous parts of the ascent as I followed behind bringing the required gear. Richard (who had decided to come after us and caught us up as we neared the lead) and Jack took a closer look at the surrounding rift, seeing if there were other routes up or crossrifts that intersected the main route. The higher we climbed, the steeper it got, and while, on the early parts of the route, there was a gully slanting up next to the path of the water, we found that after a slight constriction, the best path was directly in the water.

The holds were slippery and freezing water ran over my hands as I tried to pull myself up. We'd already divested ourselves of our harnesses and SRT kits to lighten our load as we climbed but in my increasingly waterlogged fleece undersuit, tough but heavy and stiff oversuit, and flooded wellies, each pull up was an effort. Using knees, elbows, and at times even the ceiling behind me where the rift closed down, I eventually reached a portion steeper still than the rest which ended in what looked like a small window. Beyond that lay darkness.

"Do you want to lead this section and rig the handline for it?" Jeff asked me.

I looked at the almost smooth rock face in front of me, covered in a sheet of falling water.

"Umm sure. Sounds fun."

I took the end of the rope with me as I began to climb, searching out any small protrusion for my washing up glove clad hands and tiny ledges for my clumpy wellies.



You don't climb in caves unless it's nice and knobbly and easy like this section above the Samaritan's pitches. (JW)

It's worth mentioning here that fiddly is not something cavers do all that well. Our equipment is not fast and light like that of a climber, and we are, in general, more inclined to use fixed aides or just prusik where the going gets tough. A fall in a cave is not worth the risk. Not when typical rescues take

a matter of days and hundreds of volunteers to get an immobilised person back out. So I'd never really free climbed anything underground that would give me more than a moment's concern until it came to a point where I myself was doing the pushing and being the one to secure the climb. I looked down. It was a long way. Sloping rather than sheer of course, but sheer enough to slide down and far enough that it would hurt. Jeff moved in behind me to spot me as much as possible when balanced himself on a narrow ledge high above stable ground. At least he was clipped in.

Taking a deep breath I concentrated on the climb. Above me the way was easier, merging back into the main path of the water where the rock was more pitted and knobbly, it was just the stretch I was on, relatively smooth and very steep, that was the issue. I sought out a small sloping ledge with one hand, and jammed the other to my right in a bit of a crack. Scrambling and thrutching got a knee up to about waist level on the smallest nub imaginable, and pushing up off that I managed to grab a better hold with my right hand.

Breathe. My left foot scraped the rock, seeking purchase but finding none. Pulling hard on the good hold, I substituted knee for foot and from there fairly threw myself up towards the water and what I hoped and prayed were decent holds. Splashing stream in my face, my flailing hands found purchase and I scrambled up the rest of the climb without too much trouble.

At the top the window beckoned, bottomed with, as Steph had promised, a muddy puddle of water. Jeff, on my newly rigged handline, came up and joined me at the top, peering through but not seeing much with the beam on his lamp.

“You can go first. I’m already soaked so I reckon it’s your turn.” I offered, generously.

“I think you could get through without coming out as wet as Steph, just sacrifice one arm to keep yourself out the puddle and you’ll be fine,” he mused.

“Off you go then, I’ll believe it when I see it.”

With some splashing, a few grunts, and a fair bit of hammering to widen out the squeeze, Jeff wriggled through.

“What’ve you got?” I called.

“Come and see.”

I squirmed through, Jeff’s camera flashing in my face as he took advantage of what was clearly a good moment for me. Clearing the puddle, I scrambled to my knees and looked around me.



Me getting through the squeeze or, as Jeff saw it, a good time for a picture. (JW)

“Oh wow. This is big.”

The chamber stretched above us, going up far enough that my weaker lamp couldn’t quite find the ceiling. From the right, the water that was entering the cave poured over some sheer flowstone, some twenty metres high. Dark space above and no clear view of where the water was from was dizzyingly promising.

I started to climb again, to the left of the flowstone, hoping to find a way around the vertical face. About ten metres up the holds I was using flattened out to a shallow ledge with no clear way on.

“It’s going to need bolt climbing. With dynamic rope and a drill.” I called down.

“Ok, well we rigged the handline and I’ll take some pictures to catalog the find, then we should start heading back.” Jeff replied.





The Way of the Fairies,  
avon at the top of a  
new lead just above  
the Flyer. (JW)

Jack, who had by now joined us up the climb, held flashguns while I posed on the ledge and Jeff clicked away, then down we climbed, squeezed back through the wet window (which required a backwards three point turn with face in one puddle and feet in another), and shimmied back down the long rift with the aid of our new fixed ropes. Richard, who had declined the wet squeeze had preceded us back and was leaving ahead of us so as to avoid traffic jams on the long pitches.

Jeff, Jack and I, upon reaching the bottom, paused for snacks, canned spam and chocolate bars (is it surprising I didn't have much?), then prepared to head out with the plan being that Jeff would stay with us for the more complicated lower sections, then as the pitches started to come closer together and the route finding was simpler, bomb on ahead and leave us to our own slower pace.

By now however, we'd been going for five or six hours, and a couple of pitches up, I was beginning to slow down. There's a point where your body feels much heavier and the little things that used to expedite your technique, like being able to pull yourself upright with one arm while on the rope, or hold your weight off a cowstail for a moment as you unclip it, start to become mammoth tasks. Prusiking on the shorter pitches had me tired, and the inevitable contortions at the top started to end with me flopping against a nearby wall as soon as I was untangled. Wet, cold and heavy, the vertical sections were wearing me out and my energy levels were running low.

We were on Pythagoras, the second longest pitch in the cave, so named for the interminably long boulder pile at its base which formed the hypotenuse of a massive triangular chamber, when I started to really worry. Clambering up the boulders with a jammer on the handline, I could see Jeff's light far above me and Jack's down below. Like scaling the side of a massive scree slope, the rocks were unstable, the path was steep, and the route was slippery. Hauling myself over boulders that I'd simply slid down on the way past, and having to clip in and prusik in places where I just did not have the energy to climb, I began to feel like I didn't want to go on. By the time I reached the top of the slope, my legs ached, my body wanted to lie down and sleep, and my head was in a dark place (no pun intended).

“Rope free!” I hollered back to Jack. The dangling line in front of me had been vacated by Jeff long ago and his light seemed miles above me, faintly illuminating patches of wall as he ascended. After Pythagoras he was meant to leave us behind and I had a sinking feeling that if he did, and I struggled on all the pitches as I did now, poor Jack may be stuck with me for a long long time.

Beginning to prusik, I managed to muster enough energy to pass the first couple of rebelayes but as I continued the repetitive sit, stand, sit, stand motions that propelled me up the rope, I knew I was slowing down, taking smaller steps, dying for a break.

“You have to keep going. It’s the only way out and you’re the only one who can get you there.” I chided myself.

Trying my usual motivation methods, I negotiated,

“Just up to that white streak on the wall, when you’re level with that you can stop a while.”

It wasn’t happening.

“Ok, the streak was quite far, how about ten steps up, ten seconds rest?”

I just couldn’t keep going. My arms felt like lead stuffed with marshmallow, simultaneously heavy and weak and my legs were just about ready to disown the rest of my body for abuse. I’d never felt so low, so tired, or so helpless in a cave.

“I can’t do this.”

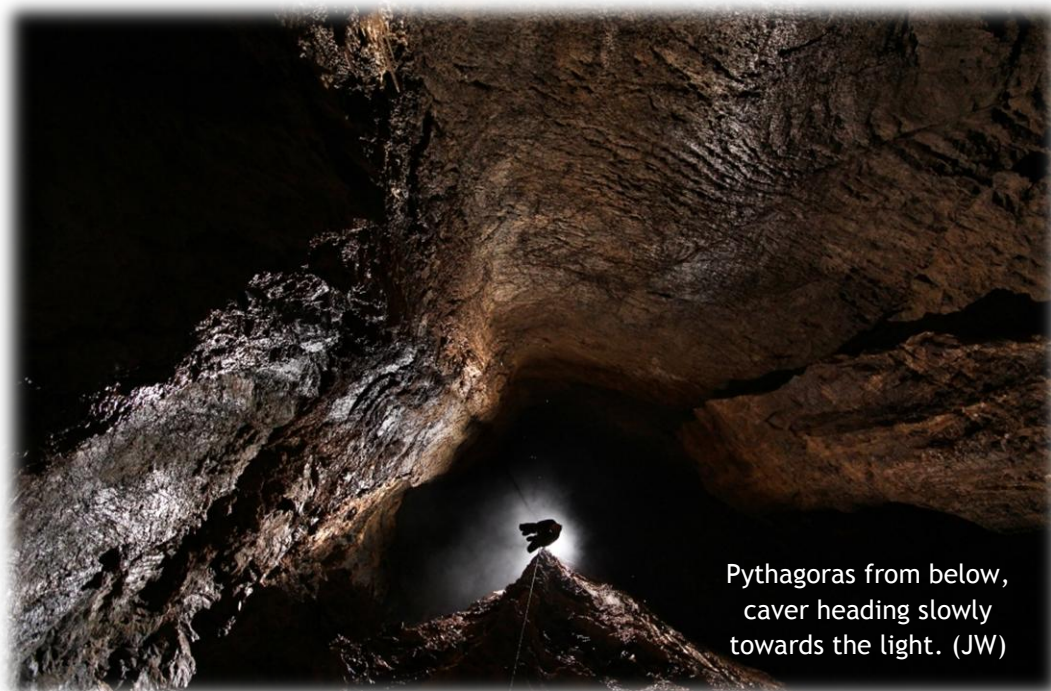
“You don’t have much f\*\*\*ing choice.”

“Maybe someone could carry me out.”

“You better be dead or paralysed before that happens.”

“Please, I can’t do this anymore.”

“Man up. You’re getting out of here and under your own steam so get a move on.”



Pythagoras from below,  
caver heading slowly  
towards the light. (JW)

I started to cry. Jeff's light above me seemed to have reached the top, or at least I hoped to God that was the top, and was hovering tantalising far over my head, giving me a beacon to aim for, while torturously reminding me just how far I had to go. Below me, Jack had caught up and was hanging idly at a rebelay waiting for the long hang rope I was on to become free.

Ashamed to be the weakest, miserable to have no alternative, and angry at myself for slowing the team down, I pushed deep and tried to force myself on. I watched my light inch over the rock face as I crawled upwards, pausing as often as I would let myself to hang limply in my harness until I could motivate myself to go on. Desperate alternative ways to get out of the cave ran through my head. Maybe someone could haul me up a pitch? Clip me to their harness and prussic me up like a tacklebag? Carry me in their arms?

But the thing about caving, the thing you accept when you go underground, is that it is committing. No one, unless you are seriously injured, is going to get you out of any cave but yourself. You work in a team, you support each other, but at the end of the day, if there's a pitch, you need to get up it, however tired you are or however long it takes, because that is the only way out, and a helping hand just isn't possible.

I knew that. And I knew that whatever happened I was going to get back to camp eventually, even if it took another ten hours. And then, the next day, I knew I'd go the last 600m out to the surface too. But hanging there, on a rope dangling in space, with a seemingly impossible stretch above me and more to come, I truly started to doubt I could do it.

It took maybe forty minutes for me to get up Pythagoras. It was the longest forty minutes of my life. I alternately wept, felt numb, and despaired. The light at the top edged ever closer and I realised Jeff had never gone on. Jack waited patiently below me, not complaining at the time it was taking. As I hauled myself over the pitch head, completely drained, and set about untangling myself from the lines, I was terrified I might fall back down, not so much because I could die, but because if I didn't I'd have to get back up.

Jeff sat at the top and I started to apologise. I'd never been so slow and weak before. Not eating enough since going underground a day and a half ago, combined with a fading adrenaline rush from exploration, had utterly tapped my reserves and left me a quivering wreck. Not knowing what I was doing, I even automatically clipped into the end of a handline that was just a hanging end of rope (luckily I was in a safe place otherwise the handline would have continued, I just didn't notice).

Jeff fed me trail mix (he called it squirrel mix which was ironic because I was feeling none too squirrely) and Kendal mint cake, coaxed me to drink water and swallow down more food, and talked to me until I started to become more responsive and aware. Jack, when he joined us, helped me up and didn't moan about the lengthy delays or the zombie-like trance the sugar low had reduced me to (hey, maybe he was just glad I'd shut up).



Me navigating one of the last pitches before camp as Jack waits below. (JW)

Between us, we got back to camp, two hours or so behind Richard and far more cold and weary than he had been. Jeff had used our slow pace to set up more photos which I suppose was some consolation, but mostly he stayed with us to check I was ok despite the fact that he ended up freezing at the top of every pitch as he waited for our ascent. Jack had carried the second tacklesack and stuck behind me the whole way, even though it meant stopping at most rebelayes if I was still on the rope above.



Me and Jack staring at formations just below camp. I'm trying really hard to look interested but that gormless look is pretty much how I felt. (.JW)



The three of us back at camp. Finally. (RH)

We got warm and dry at camp, had some dinner, and caught up with the other underground teams some of whom had just arrived and were planning trips for the next day. Gradually I cheered up, though I was still embarrassed by my performance and concerned about the trip out the next day.

After a deep night's sleep and having force fed myself as much as I possibly could, I managed to fly out the cave in just a couple of hours the next afternoon, doing double the distance of the day before in about half the time.

Sunlight was a blessed relief and as I came out the entrance, I found myself laughing and spinning around on the karst. Although I'd been at my lowest, although I'd felt like giving up (and probably would have if there had been an alternative), and although I was still pretty knackered, I'd made it. With the help of an amazing team, some squirrel mix, and sheer goddamn determination I'd got out.

And that's why caving is so addictive. The discovery can be dangerous, the commitment is definitely scary, and the physical trails are not to be underestimated, but that challenge, that adventure, is what drives you onwards. It's the fact that you have to see it through, you have to push yourself to your limits and beyond, and you have to conquer your despair and exhaustion and fears until you crawl out the other end a muddy mess, that makes me proud to do it, and a better person because of it.

The next trip I did, Richard and I went down past camp and below the Flyer to Chunder Pot, looking for a 30 year old lead originally discovered by one of the 80s OUCC explorers. We did a fifteen hour straight trip down to -900m, scrambled around in yet another hading rift for hours successfully rediscovering a passage that could well take us on, and got back up to camp for a nap before heading out the next day. I learnt my lesson and ate excessively and came out far happier in the knowledge that I could still cave hard.

But I don't regret that trip, other than for the trouble it caused my teammates, because it showed me I can be tougher than I thought, as strong as I need, and can consume enough Kendal mint cake to get me through pretty much anything.



Me at the entrance to Xitu before my final trip. (OH)

With thanks to photographers, Jeff Wade (JW), Ross Hemsley (RH), Jack Healy (JH), and Orla Hennebry (OH).