



Part II

**The exploration of the
Migovec system
between 2013-2017**

2013 - Z Miga Na Kuk

'Z Miga Na Kuk' was our first full expedition caving in the longest cave in Slovenia and what better place to begin.

It was a highly successful 5-weeks of cave exploration on MIGOVEC. Collectively JSPDT and ICCC cavers added another 1.8km of new cave passage to SISTEM MIGOVEC (already the longest cave in Slovenia) bringing the total to an impressive 27.3 km. We were also continuing to camp at 'Camp X-RAY', 600 metres below the surface, and most cavers were spending multiple days underground here.

We were quite comfortable at this depth and in fact all the findings in SISTEM MIGOVEC this year were at depths greater than -500 m relative to the entrance.

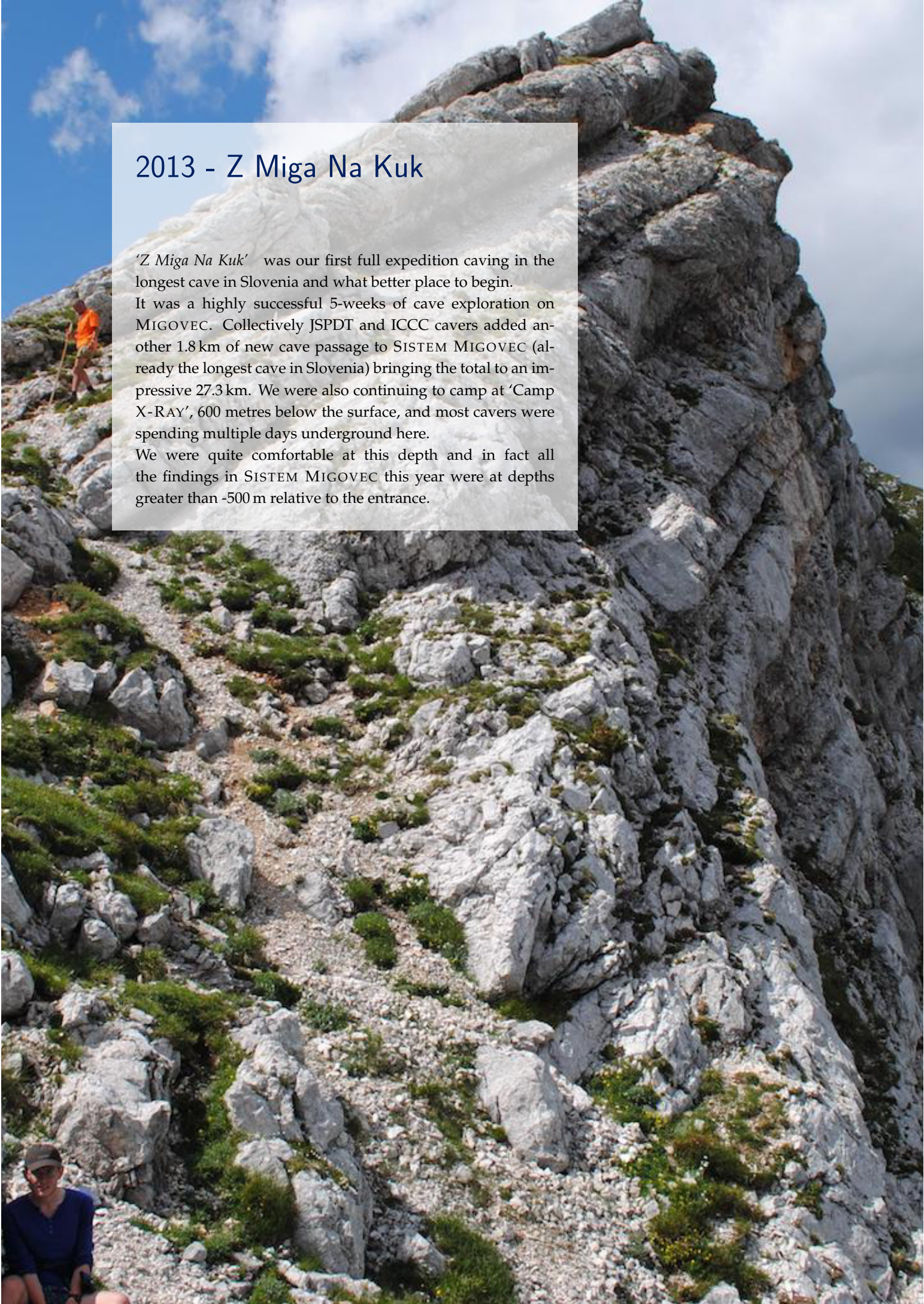




Figure 17: Inserting oneself in short and worryingly small tubes was a staple of the pushing in the ATLANTIS extensions 📷 Rhys Tyers



Figure 18: Surface exploration also entailed the pushing of small tubes. One of them broke through to a sizeable cave 📷 Rhys Tyers



Figure 19: Glorious weather on the surface enabled many scenic walks over the TRIGLAV NATIONAL PARK. Here to ZELENI VRH overlooking Lake BOHINJ 📷 Kate Smith

Exploring the longest cave in Slovenia

We'd made a name for ourselves last year, connecting the 'old' SYSTEM MIGOVEC with the newer VRTNARIJA (GARDENERS' WORLD) system and the pressure was on to perform again. We certainly couldn't allow POSTOJNSKA JAMA any chance of reusing their pre-2012 literature (now the 'longest cave in the CLASSICAL KARST').

There was little debate over the year as to the plan. Leads abounded in VRTNARIJA, and with many still close to FRIENDSHIP GALLERY, we'd have been fools not to return to camp X-RAY. We'd been there since 2010 so the organisation and set up was slick. With good food (apart from the odd meths or petrol contaminated packet), bangin' tunes (plus all the Blackadder audio possible), and the warmest Jim-sized comf for sleeping in, it was the perfect base for deep caving.

And deep caving there was! Close to camp, XANADU, the unlikely find of last year, kept going! A pitch at the end of a grim muddy tube with a howling draught was finally dropped (after several attempts and a little bit of crying) into a superb horizontal level with multiple leads. Streamways, pitches, entertaining squeezes (and an epic traverse): this bit of cave has it all.

At the end of FRIENDSHIP GALLERY was 'YORKSHIRE'. The streamway was lengthened by several hundred meters despite the fact that all the pushing teams that visited this area were completely incompetent. Ending with a large chamber and a sump, a sump bypass blocked by one small boulder is a tantalising lead for 2014.

Deeper still, on the whispered advice of Jim, BALAMORY was revisited. Lovely big pitches got deserving names (CLAPTON, BINGO GRANNY, PICK YOUR POISON) and the lead was pushed and left going at a streamway at -850m! A second offshoot led to dry, sandy passage which eventually chokes but looks suspiciously similar to, and is heading straight for the end of...

MINESTRONE! The Southern extensions of the cave were revisited. No big pitches, or stomping passage unfortunately. A terminating aven for INVICTUS was found (RCC PASSAGE OF THE YEAR) and a bizarre upward spiralling tight crawl, HASH, was pushed much further than it should have been. In the same area a sump, LETHE, was found at the end of BREZNO SLAPOV but with tantalising opportunities for a bypass.

The weather up top was remarkably good for nearly the whole expedition so the surface was a frenzy of activity. An NPC contingent meticulously catalogued and pushed every possible hole on the Western side, noting the possibilities for further extension. One surface lead, 'JAILBREAK', was pushed for over 100m. The activity was not all human as well. A thriving colony of yeast was set up and no, not in anyone's socks. An attempt to brew beer in bivi resulted something that looked a bit like beer and gave you a hangover immediately. A great success.

Rhys Tyers

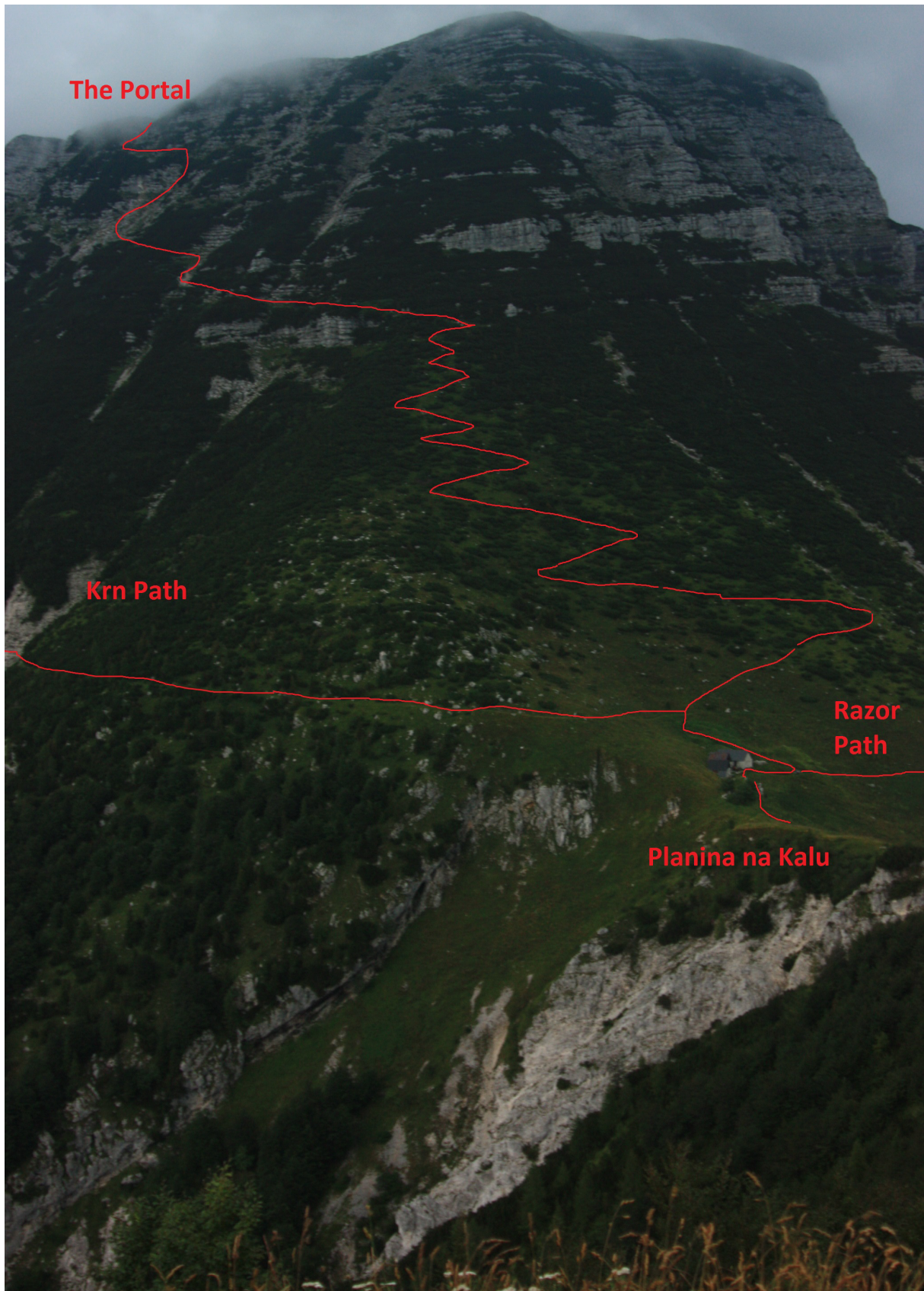


Figure 20: The face of TOLMINSKI MIGOVEC from nearby GRUŠNICA  Gergely Ambrus

**Atlantis**

- Sam Page
- James 'Tetley' Hooper

**Sam 5.40 am**

Tet's gone all philosophical...

**Tetley 7.30 pm**

Talking of Petzl, as a boy I read his tales of cave exploration, also the stories of DENT DE CROLLES, PSM, GOUFFRE BERGER etc. Looking now at the survey of our 25 km system (hopefully now 30km+ if PRIMADONA/MONATIP has now connected in) it really is amazing, truly amazing, that we've a tale and a cave of similar magnitude! I'm feeling sleepy again so I'll spare you my musing on love/relationships...

Our Minds Were Full of Questions

Sam 8.40 am It had been my longest pushing trip to date, and my first time beyond STUCK IN PARADISE. Our pushing target had been HASH, in which we had great fun squeezing ourselves through the twisty-turny tunnels. Once we had reached a point at which we felt we could progress no further through the ever narrowing passage, we surveyed our way back, adding a small number of metres to the survey. Tetley was keen to check out some of the newly discovered cave nearby – particularly ATLANTIS and its formations. Given our relative proximity to this area, I agreed to go along with this plan, although I think I was ready to return to camp already at this point.

We ventured down to ATLANTIS, and without hanging about for too long, began the long trip back to camp. Our plan was slow-and-steady, with plenty of rest breaks. I was the first to arrive at HAWAII, and sat down to catch my breath and have a drink. Something caught my eye, movement in the rocks. I looked down and there was an animal beside me! It was a kind of small, furry rodent, black with a long fluffy tail. At this point, Tetley was clambering over the rocks to join me. I anxiously asked him 'Look at this - What is it?!', and when he noticed the animal, he gave a shriek. The animal then moved off and disappeared under some rocks and we did not see it again. This all happened within a short number of seconds. Our minds were full of questions. What was it? Where did it come from? How did it get to this bit of cave? How does this make us feel?

Of course, our journey back to camp remained. Our discovery of the animal remained on our minds throughout. Assuming that it did not live in the cave (revolutionising science), it must have come from the surface. How then did it arrive at HAWAII, somewhere which to the best of our knowledge was deep underground and far removed from any of the cave entrances? Probably given the length of our pushing trip and tiredness, our minds roamed to stranger explanations, of aliens or hallucinations or magic. More often, we just laughed at the peculiarity of our experience.

We had camp to ourselves, and I seemingly slept for 17 hours(!). We decided against a third day of pushing, instead to make our way back to the surface. The concoction of thoughts surrounding the creature we found was intensified by the time we spent underground without seeing another person. We were desperate to be able to tell everyone about what we had seen, and to see if they believed us or not. Given that we saw the animal for such a short period of time, and me the longest of the two of us, it was easy to question if we really had seen such a thing. For the sake of our sanity, we decided that we had.

Sam Page

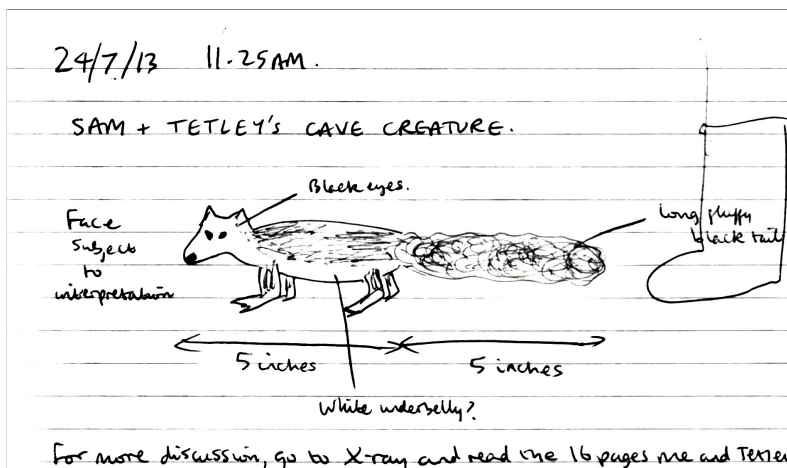


Figure 21: The creature spotted by Sam and Tetley, drawn in the 2013 scanned logbook *Sam Page*

The Minds in Question

Just back from our trip and I am ever so slightly broken... More Importantly, WE ARE NOT ALONE! Me and Tetley saw a fucking animal at HAWAII. It was some sort of mix between a rat and a squirrel, black with a long fluffy black tail. Something like the above.

After I sat down I turned my head and it was just there. My first reaction was to ask Tetley 'What is *that*?'; his first reaction was to scream as it moved and ran away. I probably watched it for around ten seconds before it disappeared. Where did it come from to end up at -800m?! Does this mean there is an entrance somewhere around there. How could it get to where we were; it looked like it was moving well yet was spooked by us. We too were spooked by it. Surely it and more of its kind don't live down here with us? First action when back on the surface is to find out if such a creature exists. P.S. Creature Theories

- 1. Saber brought it down in a cage and released it
- 2. It came from outside
- 3. Tetley and Sam had a mad hallucinogenic trip
- 4. An alien invasion of SYSMIG
- 5. A creature to revolutionise all known biology - where does it get its light/food from???
- 6. Magic

Tetley 7.30 pm So our trip yesterday... a smooth journey down to HAWAII. STUCK IN PARADISE is much much better than when I first went down but still somewhat muddy and loose. Sam's first trip to this part of the cave. We had vitaminski tea and hot fish sandwiches. Went to push HASH, added 25m (Sam described this earlier). The lead isn't great but it is still draughting and going. We then went to see the nice stal at ATLANTIS, very pretty! Back to HAWAII



More about the edible dormouse '(Glis Glis)'

General characters of the dormouse The edible dormouse *Glis Glis* is the largest of its genus and has the appearance of a squirrel. Both sexes are roughly the same size with a body of length averaging 15.3 cm, and tail measuring 12.5 cm (Kryštufek, 2001). Its pelage consist of a soft underfur, mixed with coarser, longer guard hairs along the back. The fur ranges from grey-brown to smoke-grey and is darkest along the spine. The underparts are white to pale buff, and the transition is clearly defined. The tail has the same colour as the back, albeit darker.

Distribution *Glis Glis* is widespread in the deciduous western, central and southeastern Europe except near the Atlantic and North sea coasts. It is found from sea level to the upper margins of deciduous and mixed forests, at elevations of up to 2000 m in the Pyrenees (Spitzenberger et al., 2001).

The edible dormouse, very widespread in Slovenia (Kryštufek, 1991) is a nocturnal arboreal rodent which uses tree hollows, as well as burrows to breed. Their occurrence in caves has been known about for centuries (von Valvasor et al., 1994), as Slovene hunters caught the fat dormice outside *polšine*, very small entrances (5 -10 cm diameter) to larger cave systems, where the rodents are found to nest and hibernate (Scaravelli and Bassi, 1995).

Occurrence in caves Dormice commonly occur in caves of the Slovene Dinaric karst, a mountainous area covered with a mixture of beech (*Fagus Sylvatica*) and fir (*Abieti-fagetum dinaricum*) forests (Polak, 1997). In the MIGOVEC area, the montane belt is made up chiefly of *Fagus Sylvatica* from 1100 m to 1500 m a.s.l., a zone which broadly covers the presumed lower entrance to the main system.

for tea...Sam was ahead of me and as I neared HAWAII said, with I detected a slight anxious tone in his voice, 'Tetley, Tetley look at this'. I was thinking maybe he was watching a spider or something...I approached and there to my surprise (to put it mildly) was a rat type creature. It moved! I screamed!

What! Why? How? We had some ginger cake (leaving some for the creature), also had some vitaminski tea. Dumbfounded we headed back to camp...

Sam 5.20 am Been at X-RAY for an awfully -wrong word- brilliantly long time now. I don't expect I would have been able to sleep for 17 hours on the surface. 3 days of just Tetley and I (plus our mysterious creature still preoccupying our thoughts) - where have all the cavers gone? Presumably the connection with MONATIP/B12/the BIVI have proven too distracting. Plan is to head out at some point today, as long as we are out for sunset. Before that, food, more sleep, Rum Doodle, Blackadder....good times.

Tetley 6.10 am 6 billion people on the planet and no-one can have had a weekend like the one Sam and I had! Now eating cheesy, soupy, fishy, smash (classic! with - and highly recommended - fresh onion. More Rum Doodle, Black Adder, sleep now...

Sam Page

James 'Tetley' Hooper



(a)



(b)

Figure 22: (a) HAWAII junction, at the bottom of the extremely muddy STUCK IN PARADISE pitch (b) LOST MILES passage 📷 Rhys Tyers

**Jailbreak**

- Rhys Tyers
- Dave Kirkpatrick
- Christ Keeley
- Dave Wilson
- Pete Hambley

...Thousands of hours of metal music and the power of long forgotten Norse mythology flowed through his long golden hair...

...Are there sweeter words to hear when caving?...

Discovery of Jailbreak

A group of us were meandering across the western edge of the PLATEAU. Dewi and Dave had been poking in all the B series of the holes. I had my fair share of being inserted into exactly Rhys shaped holes, a couple of which went further than my body length.

It was sunny and we were happy to be in the open air. As we neared the cliff in an inconspicuous valley I spot a couple of small holes right next to each other. Peering in they immediately join up, the pillar in the centre forming a single bar, barring our entrance (ha). Beyond a dusty body sized tube invited us in.

We each had a go with the hammer. Trying to chip at the solid rock bar. Chris Keeley steps up and from somewhere deep within unleashes the power of Thor. Thousands of hours of metal music and the power of long forgotten Norse mythology flowed through his long golden hair. He screams and attacks the rock, again and again and again. Within a few minutes its gone, all that was left were two sharpish protrusions and a lot of rock flour littering the grassy bank.

As the most sinuous caver present (who also happened to have his caving kit) I am given the honour of inserting myself first. It's a helmet off affair. Slither, slither, cough, cough, fuck thats dusty. I pop out into a Swiss cheese chamber. Lots of little holes leading off. Most die very quickly. Through one, 30 cm in diameter, there is daylight and Dewi gets a photo of me in there. One is very interesting though. Drawing a small draft I follow it and it drops, 90 degrees downwards. Gosh, a pitch. Could it go?

We return later. Me, DKP and Chris Keeley. I place a bolt or two, so does DKP. DKP descends first. The pitch, beautifully white and clean, we call ISENGARD. I ask how it looks.

'Ummmmm.....you should come down here'

Are there sweeter words to hear when caving? That divulgence that there is something indescribable or something better left to your own eyes to see. I bomb down the pitch and scramble up the bouldery passage at the bottom to join DKP. He is standing on the edge, where the passage intersects a large chamber. Nice! Chris Keeley joins us and we excitedly bumble down into the chamber.

There are a series of chambers in fact, joined by low sections. There are a couple of 2m deep holes in the floor, nearly the size of the chamber, leaving just a ledge around the edge to climb around on. At the end the floor reaches near the ceiling and further passage is choked with choss. Through a crack in the wall you can perhaps see a smidgen of daylight.

We climbed down into a couple of the holes, most have nothing of interest in. One has a narrow bedding plane that you can crawl further into. We would spend a little while on a subsequent trip trying to dig this without much success.

Heading North from where we originally dropped in, a low pebbly crawl brings you into another large chamber. The floor is rocks and boulders and they dip towards the centre, maybe a dig? At the far



(a)



(b)



(c)

end a drip has carved a narrow tube downwards next to the wall. We have a poke at it. And its got a few rocks blocking the way.

We name our find THE BARROWS due to its dead nature. Who knows? There might be more but it's so close to the cliff that any small ways on seem to have been shattered and filled with choss.

Rhys Tyers

Figure 23: (a) There were many Rhys-sized tubes on this part of the cliff face, most of which died within a metre or two. (b) Rhys inserting himself through the entrance squeeze 📷 *Pete Hambley* (c) At the bottom of ISENGARD pitch in the connected chambers called the BARROWS 📷 *Rhys Tyers*

**A storm hits the mountain**

After threatening to rain all morning, when the wind and rain finally came, it left destruction in its wake, ripping through the bivi and knocking down tents. I risked a visit to the pit and having trouble enough lighting the paper when the great rain hit. I briefly tried crawling under the corrugated iron, but it was grim and wet so I desperately scrambled back to the CASINO, getting drenched in the process.

At times, it felt as if the tent would take off, but it

didn't. At some point, an extra tent appeared in our porch. To happily spend an hour or two in your tent, I recommend trying to tune in to Radio Kiss Kiss, FM something. Eventually, the rain ceased and I quickly returned to the bivi, where Kate, Dave and Saber were merrily making music. If the weather is ok, I thought I might go to TOLMIN soon: it hit me strongly when Tetley told me I looked rough.

Sam Page**Smashburgers**

A bivi breakfast favourite!

- Add 1-2 cups smash and 1/2 -1 cups flour in pot
- Spoon in the left-overs from yesterday's slop until smooth and dough'ey.
- Add 1-2 eggs to form a dough.
- Shape into burgers, around a piece of cheese in the middle if you like.
- Shallow fry for 5 mins each side until golden brown.
- Remember to clean the leftovers pot afterwards.

Bivi Musings

BINGO GRANNY (by Saber King)



CHORUS:

Be do, be do, be do, be do,
 Be do, be do, be do, be do,
 Be do, be do, be do, be do,
 Bingo Granny Song!

Bingo Granny, she had a pet bunny
 Bingo Granny, she didn't have much money, but
 Bingo Granny, she didn't really care, she could
 Always go to Bingo!

(Chorus)

Bingo Granny, in the Bingo Hall,
 Dressed up smart, like she thinks its a Ball,
 Bingo Granny, got to get that big win,
 A packet of fags, and a bottle of gin!

(Chorus)

Bingo Granny took the bunny one day,
 To see if he had what it took to play, but
 Bingo Granny, she wasn't too wise, the
 Bunny ran off to become the big prize!

(Chorus)

Bingo Granny, she searched everywhere,
 She couldn't find him, not even a hair but
 When she went out he was there at the door,
 in a top hat a cigar in his paw

(Chorus)

Now Harry the bunny he was such a star,
 People came to see him from near and a-far
 Bingo Granny she was no longer poor,
 So she could go to Bingo much more.

(Chorus)

Exploration of Area S

7th August 2013: Yesterday we went to check the draughting holes in VRTNARIJA valley that Dave was talking about. We followed the path that Janet and Antonio made. There are three interesting spots we found.

The first one is a vertical fault line, it opens up to a pitch that you wouldn't need a rope to go in. It is about 70 cm wide and about 6 m high, and then probably drops probably 20 m. There is no draught that I could spot. This one is S5. Coordinates:

- N 46.25254 , E 13.77087, Altitude: 1627 m

Continuing along the path, 150 m before reaching the upper RA-ZOR-KAL path, on the right side, 6 m from the path, a strongly draughting boulder choke is found. The draught is about the same as S1; it does need work but it is quite promising! The best looking lead in the area. This one is S6. Coordinates:

- N 46.25053, E 13.77094, Altitude: 1570 m

Further along the path, just 50 m from S6, cold air is draughting from between the boulders. This is not really an entrance but it may be dug into something. This one is S7. Coordinates:

- N 46.25037, E 13.77139, Altitude: 1560 m

The area may be interesting for looking for further leads; there is definitely a good amount of air coming out.

Gergely Ambrus

Area S

- Gergely Ambrus


Prawn crackers

Useful if expecting people later.

- Wait until oil is hot and just spitting (test with a prawn cracker).
- Add about 6 prawn crackers or 1 poppadum to the cage and gently lower into the fat.
- The cracker should expand instantly.
- Once expanded, lift cage and empty crackers onto plate or Tupperware/unused bin bag or eating later.



Figure 24: A panorama of the glacial cirque which makes up the head of GARDENERS' WORLD valley, the whale bone and the main valley between TOLMINSKI MIGOVEC and VRH NAD ŠKRIBINO 📷 Tim Child

 Xanadon't

- Rhys Tyers
- David Kirkpatrick



Figure 25: Camp X-RAY in full swing  Iztok Možir

 The plan

'After much faffing and two dinners we are finally getting ready for bed. Dave and I had a 6 hour "push" in which we found a bypass to the EU-PHRATES super grim crawl that pops out in BIG ROCK. Tomorrow we intend to construct the XANADON'T traverse to access it. I will be drilling and Dave will presumably be complaining.'

Rhys Tyers

'I dreamt about rocks.'

David Kirkpatrick

The mighty Xanadon't traverse

We'd just woken up. The fairy lights strung across the wall cast a dim white glow across our camp. Packets of Smash, noodles and a bewildering variety of soup lay scattered across the floor, daring us to combine them into a homogeneous breakfast goop. The little stove, surrounded by half used and identical plastics bags of sugar and dried milk, was already roaring, producing the first of many pans of tea. We sat huddled in sleeping bags and fleece pajamas listening to hit songs of the eighties echo off the rock around us.

It's comfortable in camp, despite being 500 metres below the surface, and leaving is always hard. Dave and I had a plan though. A plan that would surely bring us glory and riches. So we shed our warm fleece and retrieved our damp wetsocks, furies and oversuits from the optimistic washing line that runs across the chamber. The damp, near freezing air that breezes through is not interested in drying our gear but we hang it up all the same, hoping that by some osmotic miracle we wake to dry clothes. Suited up, with a bag full of metal, rope and an overclocked Ikea drill we set off.

The day before Dave and I had been in a promising bit of cave named CUCKOO'S NEST, a tall, dry and winding phreatic passage. We hadn't found the way to the main pushing front and had instead spent some time poking around every moderately human sized hole that the previous team may have missed. Towards the end of our trip, with no significant new passage to our name, I climbed up into a sandy chamber and followed a low crawl. My helmet scraped along the ceiling as I dragged myself past the final constriction to be greeted by nothing. The crawl flanged out into vast, inky blackness. I could barely contain my excitement, the prospect of a big new pitch all to myself was too much. I leaned tentatively out into the darkness and examined my new discovery.

The bottom was lost in the depths and the far wall was only just visible. I turned to my left, and my heart sank. A rope. The thin white record of previous cavers dangled down, mocking. I recognized it fairly quickly, the only nearby large pitch was BIG ROCK CANDY MOUNTAIN, this must be a window into it. I scrambled back to Dave to tell him of my finding. Despite the let down this was still good news. The previous route to CUCKOO'S NEST was an awkward rift traverse followed by the most unpleasant muddy, wet, draughty crawl known to man. If we could rig a bypass down to the window I had found the new route would be an easy walk from camp, saving much time and psychological trauma for future explorers.

So here we were, to rig the bypass. At the top of BIG ROCK CANDY MOUNTAIN, Dave and I set up a forward base. We had brought a gas stove, tea and as much marzipan and ginger cake as we could cram into a tackle sack. As the competent and confident caver of two years caving experience I was going to go down first.

My plan was to rig a traverse from a rebelay I saw from the window. I grabbed a bag of rope and slung the drill strap around my



Figure 26: Rhys hard at work

 *Kate Smith*

shoulders and descended. The pitch wall is mostly an interesting combination of mud and flakes, neither of which are ideal for a bolt. After some swinging though I found a clean, solid looking face to bolt. I lined up the drill and pulled the trigger. The high pitched whine and dusty spray flying from the drill were satisfying and soon the drill bit was smoothly disappearing into the rock. The drill slowed, the whine turned to a grind and finally it sputtered a few angry clicks at me and stopped.

I tried again, and again, and again. But the same each time, whine, grind, click, stop. Each time stopping faster until the drill would no longer spin. The battery must be dead, I thought, and climbed back up to Dave. A minor inconvenience at the most we thought and returned to camp to retrieve the spare battery. A while later I was back, inserting the drill into my half finished hole, a new block of chemical energy clenched between my thighs. But again the drill refused to cooperate. Whine, grind, click, stop.

The drill must be fucked, I thought and climbed back up to Dave. A second inconvenience but we were not going to be deterred by shoddy Swedish engineering and again trudged back to camp to retrieve the hand bolting kit.

Back at the now familiar spot, the half drilled hole staring at me, I wielded hammer and driver and got to work. I might whine, the driver might grind, the hammer might click but we would not stop.

Tap, tap, tap. Tap, tap, tap. Tap, tap, tap. The clinking of the hammer against the driver calmed me into the familiar bolting rhythm.

Tap, tap, tap. Tap, tap, tap. Almost done.

Tap, tap, tap. Tap, tap, tap. Tap, tap, crack.

Tap, tap, crack?

I looked at my almost complete bolt. A crack had emerged from it and ran a few millimetres into the rock. Bollocks. I started again. But like my attempts with the drill, the second time was no better. Another crack halfway through bolting. Defeated, I climbed back up. We would need to regroup.

As I reached the top of the pitch something caught my eye. A row of bolts running across the top of the pitch. They would get us more than half the horizontal distance we needed! A miracle I thought as I got off the pitch. In front of me was a glowing silvery spirit, shaking and muttering about thrones and glory. Was this the deity that had placed the bolts?

No, no, squinting my eyes revealed Dave's face under layers of silver survival blanket, clutching a pathetic tea light for warmth. 'I have built a throne' he declared, through chattering teeth. And scuttled further back into the passage. I followed and Dave lead to a large pile of rocks. It's similarity to a throne stopped at 'not being the floor' but Dave sat atop it proud as any regent had ever been. I decided it was probably Dave's turn to do some rigging and sent him to rig the mysterious bolts. I sat, drank some tea, ate some ginger cake and prepared for a long wait. I hoped I would be spared the madness that



Figure 27: BIG ROCK CANDY MOUNTAIN (a) is a twin pitch located at the end of FRIENDSHIP GALLERY, over which it is now possible to traverse (b) to reach the CUCKOO'S NEST extensions 📷 Jarvist Frost

had overcome Dave.

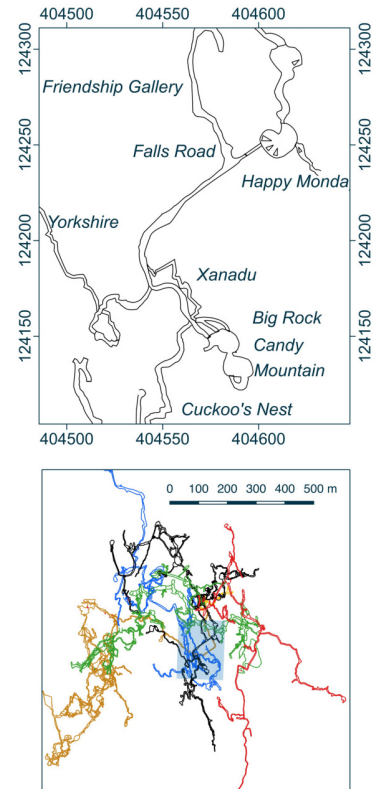
Some time later I heard footsteps approaching. Was someone here to take my throne? My kingdom with its silver sky and single flame! The sky moved and Dave's face loomed over me. 'I rigged it' he says as my cognisance returned. I shivered my way out of the remaining foil and handed the tea light to Dave. Without the heat of the tea light or recent movement I made my way to Dave's new traverse, eager to get to the end and bolt the cold away. I vibrated along it, still none the wiser as to its creator.

We would later find out that someone else also tried to reach a window in BIG ROCK (a different one) but had failed, leaving these bolts behind. Their effort would not be in vain. From the end of the traverse I reckoned I was just two or three bolts away from reaching the window and emboldened by this thought I began once more. The rock here proved strong enough to hold my bolts and I at last I could see the window. I swung over and clipping my cowstail to a flake to hold myself in place, I started the final bolt. This final hang needed to be right over the window so that I could swing in, but to reach the ideal bolt position I had to lean out sideways and stretch out with the hammer. Soon my arms were quivering with the exertion and I had to rest. I was tired and the bolt was barely started. I hung for a while. So close yet so far. As my faith wavered and I considered turning back.

But then Dave called out. He was behind me. He had descended the original pitch and was now visible, on the other side. Stirred by companionship I bolted once more. It was slow going. Several times I shouted that I wanted to give up but Dave's friendly words reverberated around me. Sometimes he offered encouragement, mostly he complained about the position of his genitals within his harness.

With a final tap I decided the bolt was secure and lowered myself into the window. Dave came across to examine the new route, finding me collapsed in the sand. Our quest complete, and eager to claim the praise and applause we would surely received, we returned to camp.

Rhys Tyers



Survey 1: Plan view of the BIG ROCK CANDY MOUNTAIN area, including the XANADON'T Traverse, Slovenian National Grid ESPG 3794

...Soon my arms were quivering with the exertion and I had to rest...

Mig colloquialisms

The following is a necessary update on the Migovec vernacular first published in the Hollow Mountain (JSPDT, 2007). This particular dialect of caving linguo is alive and thriving.

Cow Dried milk powder.

Clag What clouds look from the inside when enveloping the mountain

Comf Soft comfortable material to sit or lie on e.g. squares of chopped karrimats

McGowan A dwarf pine based sofa so called because it resembles a bodybag containing the eponymous caver

Faff To laze, waste time or take part in pointless labour

Ey-Ohh All purpose non-descript salutation

Twatty Adjective used to describe sections of cave which are tight, annoying or unnecessarily awkward.

Schonky Blanket adjective to describe anything dodgy, dangerous or loose, especially in caves

Vitaminski Powdered vitamin sugary fizzy drink (comes in blue, yellow, orange and green flavours).

slushies Vitaminski mixed with ice from M10 on a hot day

Blue Cloud Patch of blue sky on a day of unrelenting clag

Sunset Evening ritual of fortified mountain tea consumption

Slop The evening cooked meal to go on the carbohydrates.

the Hydro A lovely swimming location near the Hydroelectric scheme of Tolminske Ravne

2nd aid Pills for hypochondriacs

Old Lag Own kit, Leader, Driver and experienced member of ICCC aged 25+

Lightning Alley A strip of fairly flat grass located high up on the Plateau. Not for the faint hearted.

M10 Don't fall down M10

Plateau Undulating surface of Tolminski Migovec, anything between the Kuk and Mig trig points

Mig our spiritual home

Union/Laško polemic Argument about the various merits of the two available beers in Slovenia. ³

³ They are from the same manufacturer

A Name Fit for the Lead

INVICTUS feels a long way from home. My pushing trip there with Tetley in 2012 were at the time the hardest thing I had physically done. I believe one of the trips I did was in excess of 22 hours. And now we were back to push further than the furthest there was. Clare and I, a crack team if ever there was one.

Down the thick mud of STUCK IN PARADISE, past the infested HAWAII and into PENITENCE. Half an hour or so of crawling on sharp pebbles. The sort that shatter as you place your weight on them. And then into the comparative respite of SALVATION, where the floor is merely sand, but the ceiling no higher. Past the low junction, one side entirely full of sand. An easy dig were it 700 m higher. Through the boulder choke that Tetley and I had cleared last year (and the one that had briefly entombed him). Onwards through the bizarre shattered chambers of BRAVE NEW WORLD, ignore the drippy inlet that almost certainly goes nowhere, squeeze past the ceiling slab collapse and pop out into INVICTUS. Great piles of sand crowd the sides of the chamber.

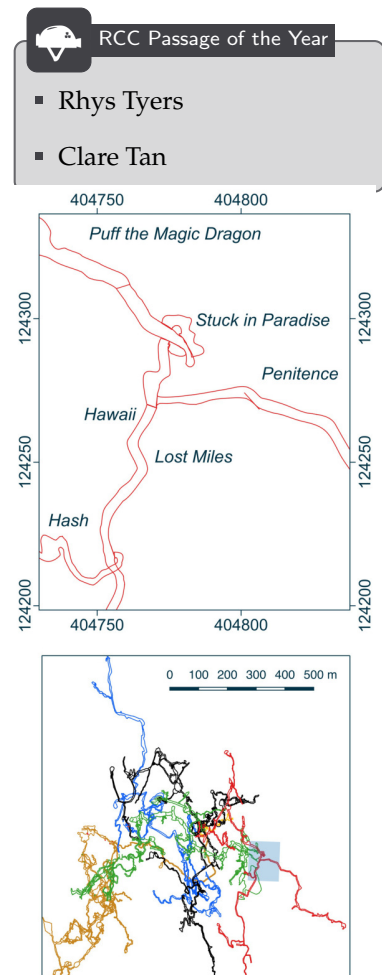
At the end of the sandy passage we reached our goal, a pitch I had been forced to leave last year. INVICTUS intersects a shaft about halfway up. Maybe 15m to the bottom. A small stream falls down from the top. We place some bolts, chuck the rope down, promise to fix the rub point when the passage goes. We did not need to follow through on the promise.

At the bottom, a typical flat, white, clean washed floor. The stream from above splattering and collecting gradually towards the far side of the chamber. There a passage leads off. We poked our heads in. A sump. Pretty and blue amongst the white rock, but its terminality spoiling its beauty. We searched for a while at the bottom, and up in INVICTUS for a way around but to no success. The aven is a potential lead, but the rock seemed chossy and loose. A difficult climb at best.

We named our lacklustre find RCC PASSAGE OF THE YEAR in honour of the lacklustre award we had received from the Union. We headed back out.

Unquenched for exploration we elect to pop into HASH on our way past. The tight, upwards spiralling, dry inlet off MINISTRONE had been pushed by more people than it's nature deserved and had revealed the expected pittance of passage. Wiggling our way to the top, we found the small chamber in which Sam and Tetley had stopped. We push on, into more upwards tight crawl. After a short while we reach a dog leg in the passage that Clare did not want to attempt. Two things are known about Clare; she is small, and she is crazy. I suspect it would be deeply unwise for anyone larger or saner to attempt to push further.

We surveyed out and climbed back towards X-RAY, arriving disappointingly early. So early that we could not yet kick the sleepers out



Survey 2: The HASH pushing front, Slovenian National Grid ESPG 3794



The story of Hash — eventual death of a lead for the ‘connoisseur’

July 20th — ‘Yesterday’s trip to MINISTRONE was a lot of fun. Looked at the little leads going off and Kate’s climb. All became little squeezes with no draught. Except a climb (cairn at base of it) around PSS 21 and PSS 24, which leads to a downward sloping body sized tube which draughts. I went down it a good 5-10 m but it seems to go on forever and felt too committing to do without help/rope. HASH is a new lead found by Tim on the way back. Around 30-40 m down LOST MILES from HAWAII is a climb up on the left hand side. PSS for HASH is at start of climb. Left at draughting body sized crawl as we were short of time.’

Clare Tan

July 22nd — ‘Oh, also, we went and pushed HASH, adding around 25 metres to what Tim *et al.* had surveyed previously. Hash is fucking twatty and does continue beyond what we surveyed. Problem, only Tetley could fit through the squeezed just be-

yond our last survey leg. It was so close, just my shoulders are slightly too broad..with some tools we could’ve enlarged it but we would have had to gone back through to collect them. Beyond the squeeze, the passage continues upwards into a small chamber, 3 m wide, 8 m tall with a tight passage continuing off at the top. (all according to Tetley of course). Go push you narrow shouldered people.’

Sam Page

August 1st — ‘I am currently sat in a big silver bag in FRIENDSHIP GALLERY with Clare. Today we pushed and killed INVICTUS. It ends in a very tight rift with a puddle. The 20 m of passage is named ‘RCC PASSAGE OF THE YEAR’. We also pushed HASH to a tight chicane crawl thing that is is inadvisable for people bigger than Clare to go down. All in all got about 50m of passage. The silver bag, ‘Camp Gamma Ray’ is very warm grim.’

Rhys Tyers

Bivspeak Syntax

At heart, Bivspeak is the extension of common Speleolinguo, with spices from Unitongue and English slang. The core of the Bivi syntax is characterised by *anthimeria* or the act of verbing nouns (see what I did there?) and vice versa. This is useful for a bared down, fast and easy communication. Nouns like fork, knife, spork, teabag, milk, tea, vitaminski, cow, popcorn etc... are subject to this important rule.

For example the inadvertent use of:

I would like a spoon

would result in the following retort from a fluent speaker:

I think you’ll find that the correct phrasing is ‘Spoon me’ or alternatively ‘I would like to be spooned’. Please is optional.

of bed. We are no inexperienced pair though, so we construct CAMP GAMMA RAY to ease our wait. A foil survival blanket thrown over a washing line forms a tent. A gas stove fills said tent with heat and carbon monoxide. So we pass the hazy hours till our designated slot in camp.

Rhys Tyers

Leads in the Labyrinth

Despite much planning and scheming over the course of the year Oli and I had conspicuously managed to avoid caving with each other for most of the expo. With just a few days to go before derig we finally decided to put our plans into action. On a night train of course.

Oli and I were quick and slick down the entrance series. We caught up with Chris Keeley and co. just before camp. We overtook and geared up in the staging area in FRIENDSHIP GALLERY. With an inappropriate feeling of optimism we packed the drill, gearing up for a big pitch series. Oli had spun wild tales of bottomless pitches and caverns measureless to man. Based on my previous experience of YORKSHIRE and its continuations, I was doubtful. I found it hard to believe that the tight, thrutchy rift would develop into anything other than tight thrutchy rift but perhaps it would break into the master system and the mystery of MIG would solved.

We snuck past the sleeping cavers in camp. Our gear clanked loudly and our swearing echoed as we climbed over the awkward mud wall beyond camp. Following FRIENDSHIP GALLERY to the end, past the BIG ROCK turning, brings you to a boulder strewn chamber. Somewhere here is a dug route downwards. It's long and sinuous and impresses upon you the lack of fear the Jana and co (the diggers) had. A couple of small chambers, and a big drippy pitch bring you to an immature streamway. Do not follow the water, climb above the water chamber (Tetley and I had followed the water previously down far too much grim immature stream, still a lead though).

Then it's just a matter of following the thrutchy vadose passage. Occasionally Oli led me into a dry meander that would then rejoin the streamway again. I don't think anyone has followed the stream all the way down, so who know's if there's anything off there. At some point there's an interesting climb down into the stream again where you cross over the rift and double back. There's also a small section with a quite a few dry passages heading off, supposedly thoroughly explored by Saber and Oli.

Once at the limit of exploration Oli coaxed me forwards, to the head of the 'bottomless' pitch. Gently I edged forwards until I could see down, all of perhaps 10 metres to the floor. Oli assures me that his previous claim was misremembering and not in fact a trick to lure me to his pet shit lead. Still, though not deep, the passage bellowed out into a middling sized chamber. With a big bag full of equipment we barely knew how to use there was nothing to stop us. Oli retrieved the drill, clipped in the drill bit, attached the battery and set to work tunneling a new home for our shiny raul bolts.

Quite a while later, with no progress, and after several attempts at drilling in various spots Oli told me what he thought the problem could be. Super hard rock? A blunt drill bit? Maybe he wasn't pushing the drill hard enough. I pondered.

'You've got the drill in reverse' I offer.

We swap places and with the drill rotating in the correct direction I



Slinging in the Rain

- Rhys Tyers
- Oliver Myerscough



Figure 28: Rhys Tyers stands at the summit of VRH NAD ŠKRBINO 📷 Dave Kirkpatrick

...With a big bag full of equipment we barely knew how to use there was nothing to stop us...



Figure 29: Rigging one of the new finds in Monatip 📷 Iztok Možir



Figure 30: Tetley at underground camp 📷 Jarvist Frost

...Oli decided to solve this problem as he solves all his problems...

try again. I successfully drill a hole and place a bolt but carelessly hammer it on so that the end deforms and I can't get the nut on. So much for that. Frustrated and itching to get down the pitch we scanned the surrounding rock. We located a nodule of rock sufficiently large to abseil off (but not too large as to make you overconfident in its abilities as an anchor, that too would be a mistake) and a second, further back in the passage. We gave each a fetching green nylon choker, attached our ropes and I headed down.

Unfortunately our carefully chosen anchors placed me perfectly under the small stream that we'd been following all the way from YORKSHIRE. I scrambled desperately at the wall and clawed my way out of the water. I looked around. I wanted a nodule, flake, a stal, anything for a deviation. Smooth walls offered me nothing but glistening reflections. I was however gripping a small crack in the wall. I tied an overhand in both ends of a sling, rethreaded one (for a krab) and inserted the other end of the sling into the crack and pulled it, till the single overhand was wedged. I clipped the krab above me and carefully loaded my crack deviation. It held.

At the bottom it became apparent that we were just on a ledge. The ledge was flat and washed clean. A 5 m by 5 m by 15 m deep hole was in front of us, large boulders perched precariously above it. Across the holes, at the same height as the ledge was a crawl going off. To the right was a crack, filled with boulders, descending into the shaft. Up from the crack a small hole led off. A crawl can be seen heading off but looks a little immature. We headed back and began thinking about how to get down the pitch. Oli decided it would be incredibly dangerous to attempt to descend the pitch without proper gardening first. I suspect he just wanted to push big boulders down the pitch. He pushed a couple, varying from the classic TV sized boulder to some approaching human size. They went down with a spectacular bang. He was right though, it didn't take much to push them down. He went for another one. I winced expecting the loud crash but nothing came. The two Oli sized boulder had become wedged on the edge of the lip and the far wall (there was a sort of corner with the crack). On the near side it was stuck on a tiny protrusion from the wall. I tried to hit it with a hammer but it was surprisingly solid. We looked at each other. There was no way we could descend with this death hanging above us.

Oli decided to solve this problem as he solves all his problems. He started throwing rocks at the rock. Gradually the rock inched further downwards. Each thrown rock budging it down another few millimetres. Eventually it fell. It was a close thing to as we were running out of rocks to 'garden' with.

We looked about for some good rock to bolt in but found none. Eventually we squeezed into the crack and found some suitable naturals to descend on. At the bottom we landed on what had been a clean flat floor, now littered with the remains of our gardening. The water trickled ahead into stooping passage and very quickly sumped. It was very pretty, all blue green against nice white rock but it wasn't

what we were hoping for. We climbed back up.

Going up the crack there was a small passage. We crawled up this a way until it brought us out in a small chamber with some water trickling from 5 or so metres above us. It might be possible to free climb this but you'd probably want to bolt it. Back down again and we turned our eyes to the final lead, the crawl across the other side of the chamber.

We were hand bolting by this point having become frustrated with our ineptitude with the drill. 3 or 4 bolts brought us safely into the crawl. Down the sandy abandoned phreatic passage, we came to a point where two boulders blocked the way. We tried moving them but they wouldn't budge.

Back at camp we collapsed. I awoke 12 hours later and tried to cajole Oli into going pushing or maybe even heading out but he was not a man who could be moved. Another 10 hours passed. We were alone, on the last pushing trip of the expo. We got up at 11 pm or so, packed up as much as we could to get the f out of there. The next day everyone else would come down to haul the rest of the camp stuff out and the derigger would do the needful. The weather forecast predicted armageddon at 12 am. As we packed we realised we could get everything into 5 bags, most of which would be relatively light. So we took 5 bags. Oli took the two heavy ones and I took the three light ones. Another 5 hours and we emerged into the morning light and drizzle. A few bleary faces greet us at the bivi.

Rhys Tyers



Lead advice

Beyond, the crawl continues, likely bypassing the perched sump. A bit of capping or even feather and wedging would get you past.

Rhys Tyers



Figure 31: A few bleary faces in the bivi greet returning explorers after a stormy night and relentless, cold burja winds blowing from the north 📷 *Kate Smith*

**Brezno Slapov**

- Clare Tan
- Iztok Možir

**Balamory**

- Clare Tan
- Grega Maffi
- Iztok Možir

**The Slop**

The slop is the evening meal.

- It generally takes the form of a stew accompanied by rice/grains/pasta/cous-cous.
- Usually, there is protein/-carbs in the stew as well as the accompanying dish.
- It starts with starting soaking any pulses and dried veg (including dried mushrooms) after breakfast/lunch in water with the contents of flavour sachets added.
- The favour sachet selected determines the type of slop and what other ingredients might go with it.

At the end of Atlantis

Pushed BREZNO SLAPOV, which had been discovered by Jana Čarga and Iztok Možir the year before, last night, it was a great trip!

Dropped a couple of pitches to get to a canyon/rift with a stream, followed it and eventually got to a sump. But taking a left turn down and inlet leads to the base of another wet pitch and a continuation of passage, but it was wet and we didn't go on.

Clare Tan

Below Balamory

06/08/2013

Exciting night of pushing yesterday. CLAPTON pitch is a massive space. Effectively like two shafts right next to each other. We drop the shorter one. Couple of leads at the bottom. One has a bedding plane squeeze that stopped Maffi, it follows water to a small pitch, might join up with something off the other half of CLAPTON. We mainly pushed the other lead, schematic on facing page. It's still open and going. Unfortunately when we started to survey we discovered a crack in the clino glass. Which is why the tentative passage name is now CRACK SHACK [ed. not on page reads 'Renamed PICK YOUR POISON']. There's also a lot of black sandy silt deposition in our passage, plus it's in keeping with the cocaine theme... Going back today to survey waiting for day trainers to arrive, listening to music, writing this to put off pissing....I really like caving and camping underground... P.S. none of the leads were killed during this push!!!!

Clare Tan

07/08/2013

Went back to CLAPTON yesterday to survey what we found the previous trip 200m added to this year's total. There are so many leads there we called it PICK YOUR POISON. Will be dreaming about it now for the next 11 months... I guess this is now my last few hours in camp. It's been a great expo of caving for me - many thanks to all my pushing/camping partners: Saber, Izi, Rhys and Maffi for the excellent trips and company. Thanks also to all who have camped at X-RAY for the laughs and great conversation. Almost can't believe another expo is drawing to a close...caving-wise I feel thoroughly satiated, but I've enjoyed myself so much that I don't want it to end. Ah well, there's always next year, and the year after, and the year after...I wonder if I'll still be here in 10 years? I should really go to sleep but my body doesn't want to cooperate....Maybe it's time to read Tetley's 15 page epic (from earlier in the expo).

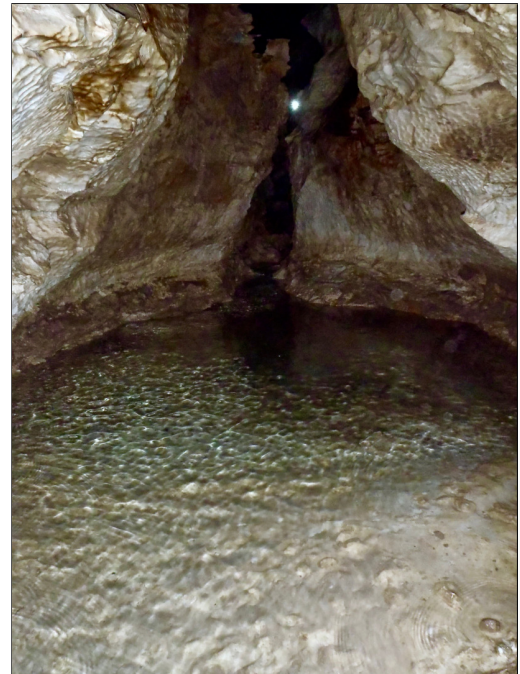
Clare Tan



(a)



(b)



(c)

Still no inspiration, I guess Clare Tan has drained out of me even this, nor only all energy, while trying to figure out how to squeeze through those passages we've found. Anyway it is the last day in X-RAY this year. Wish this refuge was open the whole year. Aja! I want to thank Dave Wilson for the hint on BALAMORY. He made possible the biggest discovery this year! And with this he also gave Erik and me the sensation of pioneers. Thanks Dave! (well this sensa-

Figure 32: (a) The cascading steam from BREZNO SLAPOV ends at an ominous sump (-802m) (b) Clare Tan navigates through the stream and canyon passage below BREZNO SLAPOV. (c) Water from the stream passage accumulates in deep pools 📷 Iztok Možir

tion we get every time we push something nice but this one could be compared with findings of Columbus, Marco Polo, Juri Gagarin :)) Thank you Erik, thank you Clare Tan. Thank you everyone that made MIG adventures possible. Over and out.

Grega Maffi

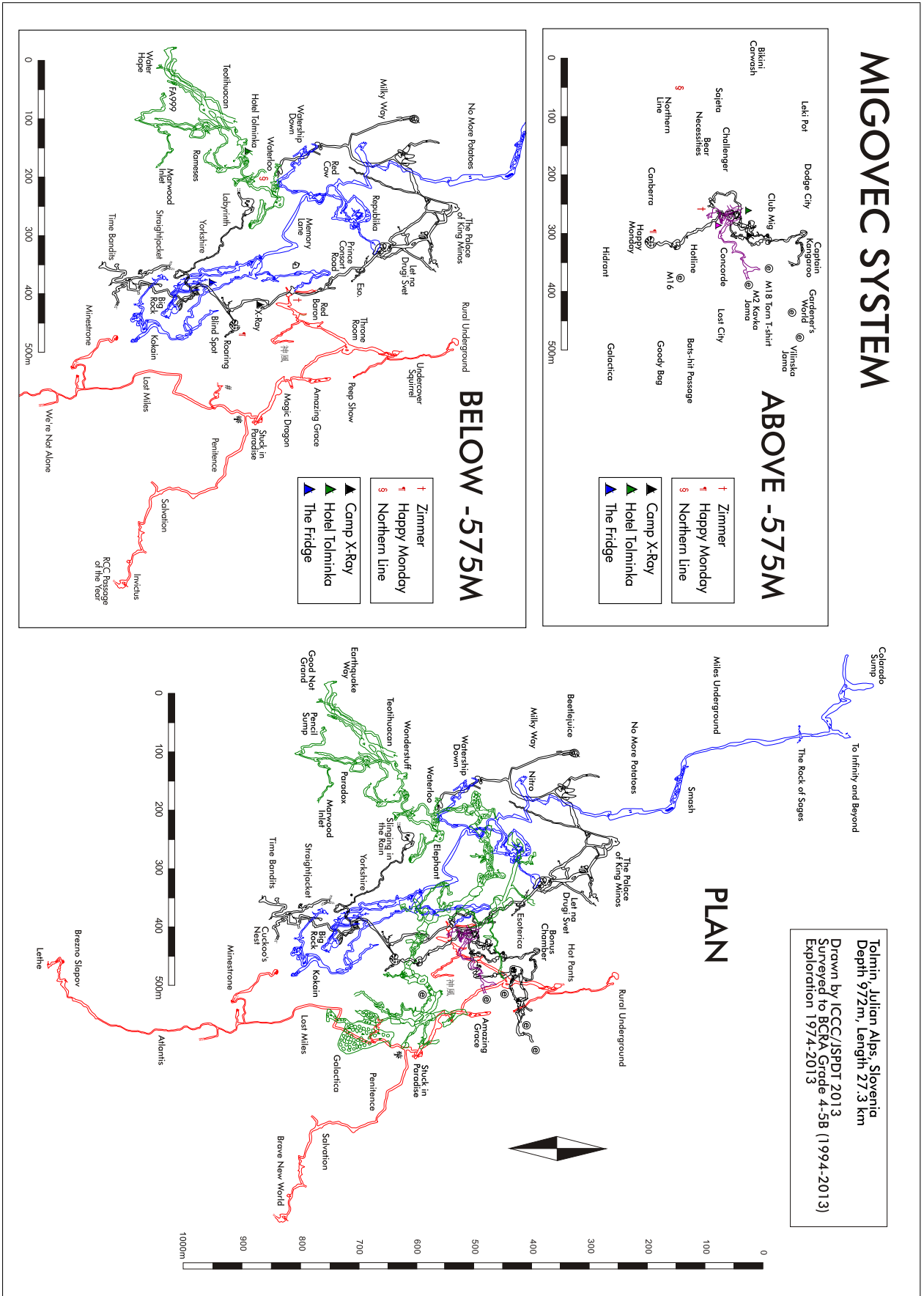



Figure 33: Marjan Klobučar, Slavica Klobučar, Clare Tan, Nadine Kalmoni, Sam Page, Janet Cotter, Chris Keeley, Kate Smith, David Kirkpatrick, Rhys Tyers, Fiona Hartley, Dave Wilson, Oliver Myerscough 📷 *Tim Child*



Number Crunching

Sector	Passage name	Survey length (m)	Stations	Average leg (m)
Apollo	Apollo Traverse	21.63	5	5.41
	Beetlejuice	55.46	9	6.93
Balamory	Bingo Granny	21.06	5	5.27
	Clapton	51.04	11	5.10
	Kokain Lab	69.8	12	6.35
	Kokain Rute	113.09	21	5.65
	Pick Your Poison	191.66	28	7.10
Kamikaze	Rural Underground	101.29	23	4.60
Lower Pleasures	Curiouser and Curiouser	69.42	15	4.96
	Curiouser and Curiouser 2	35.45	14	2.73
	Slinging in the Rain	86.01	17	5.38
	Labyrinth	95.94	31	3.20
Stuck in Paradise	Hash	39.64	14	3.05
	Hash2	26.07	8	3.72
	Hash3	21.4	9	2.68
	Lethe	138.97	30	4.79
	RCC passage of the year	26.5	7	4.42
	We're not Alone	39.96	7	6.66
Xanadu	500m	15.59	7	2.60
	Cuckoo's Nest	220.73	41	5.52
	Dwarf Pine	33.2	6	6.64
	Hydrophobia	63.42	11	6.34
	Rejuvenation Rift	103.39	29	3.69
	Straightjacket	24.31	11	2.43
	Time Bandits	126.56	22	6.03
	Xanadon't	34.28	12	3.12
Total		1825.87		



A person wearing a bright red protective suit, a yellow helmet, and green gaiters is climbing a steep, rocky mountain slope. The person is seen from the side, moving upwards. The background shows more of the rocky terrain under a cloudy sky.

THE 2013 expedition drew to a close. The pushing had been harder, and perhaps not as immediately rewarding as the previous year. The vast pitches and storming phreatic were elusive in most areas. The one exception of course being the surprise find below BALAMORY: the big active rift pitch series from KOKAIN to PICK YOUR POISON. But MINESTRONE had failed to yield to extensive pushing, INVICTUS gave up with a terminal aven, BREZNO SLAPOV proved too wet to push far.

Despite this 1.8km of passage was found, at great depth. After a final push to SLINGING IN THE RAIN Rhys Tyers and Oliver Myerscough put the cave to sleep for the year, hauling out the 5 bags they managed to pack X-RAY into.

The weather had been exceptionally good for the entire expedition and this was reflected in the general morale. To take advantage of the good weather the expedition decamped the mountain a couple of days early to enjoy the baking heat of TOLMIN, and the cooling waters of the SOČA river. The JSPDT and ICCC parted ways for the year.

The longest cave in Slovenia would be waiting for them next year.