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FEATURING THE MCG ABROAD

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AGUA 1996 - part two

by Timothy Francis

<u>Introduction</u> The destination of this years MCG expedition was changed at extremely short notice due to lack of personnel. Six people were not considered sufficient to tackle the rigours of the Piaggia Bella, Italy so we opted to return to Cueva del Agua, Picos de Europa, Spain. This was previously visited by MCG members in February (newsletter 253) so the logistics of organising a trip were minimal. This article is restricted to the caving activities undertaken on the trip. Refer to Yvonne's article in newsletter 256 for "the other bits!".

The primary goal of the expedition was to consolidate leads noticed on the diving expedition in February. We had intended to camp underground at Consort Hall but found more than enough to keep us occupied in the Boulder Hall area nearer the entrance. After each trip we made the long slog back up the gorge and normally made it back in time for an evening meal at the bar in Tresviso. A bivvy site equipped with light weight camping gear and food was located at the top of The Ramp. This proved to be invaluable on long pushing trips or whilst sitting around waiting for others. On the downside our small team had very little time to recover in time for the next trip. In total eight caving trips were made to Cueva del Agua, although we were in Tresviso for only 12 days..

<u>Boulder Hall Area</u> Our first concern was to try and make sense of the complicated maze of passages in the Boulder Hall area. It soon became apparent that the survey we had bore little resemblance to the actual passages above The Ramp. Indeed it was not until after our return to Great Britain that the reality of the survey dawned. The lower and upper levels of the cave had in the past been superimposed on the survey. Passages had been joined together which in fact lay several hundred metres apart vertically.

The first loose end we tied up was an undescended pitch at the top of Boulder Hall (see survey) at the end of a pleasant passage decorated with moonmilk. The walls and floor of this section of the cave are liberally covered with mud making it difficult to find a solid belay. Eventually a suitable natural was used to descend a 25m pitch which was found to merely drop out of the roof in the Bypass! The rope was pulled through rather than prussicking up past some hideous rub points. This junction was marked with a small pile of stones and later found on the survey There was no indication of a height difference on the map.

On the same day, whilst looking for the way on to Brian Baru's Passage, Joe and Martin pursued a horrendously muddy climb, passing the limit of previous explorers to discover two small holes in the floor at the top. There were no stones nearby to throw down so Joe could not determine their depth. These draughted well so were investigated on a subsequent day. No naturals were available so we spent a cold, tiring hour trying to put in a few bolts. The rock is extremely hard but we were reluctant to carry the Bosch drill down the gorge unless absolutely necessary. Eventually the bolts were placed and the pitch descended. It began as a sharp narrow rift but soon dropped out of the roof of a large chamber. Large flakes of rock blocked the free hang so a rebelay was attempted. I was able to get off the rope and explore sixty feet of a high level passage. This was floored with the usual mud but well decorated. Further progress was stopped by a pitch and not descended due to having no more rope. This passage must intersect the Boulder Hall at roof level, or pass extremely close by.

Returning to the main pitch a deviation was rigged and the descent continued. We had landed in the passage just above the rope climb after Boulder Hall. Julie derigged the deviation so that Joe and Martin could drop the rope down from above. The pitch was measured at 23 metres (see survey). Another loop in the Boulder Hall complex had been discovered.

Orange Arcade

The description of this passage was somewhat vague in the LUSS journals. Its intriguing name and a conversation with John and Jim in Arenas de Cabrales suggested that it may be worth a look. We took longer than expected to find the passage as we relied too heavily on the survey. The survey excludes lower level passages to aid clarity. However it was well worth the perseverance as Orange Arcade is an exceptional piece of passage. It is desperately in need of taping as much of the route contains fine examples of mud and calcite formations. In places parts of the ceiling are peeling away leaving intriguing patterns. The passage gets its name from a bright orange flowstone cascade at the far end. All routes become too small to follow with no digging potential.

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The flowstone cascade looked extremely similar to the orange flowstone at the end of Bone Passage which I had seen in February. Both have a similar passage cross section, have a similar gradient and both end where the calcite meets the roof. I'm not sure whether this similarity has been noticed before. Once back in Tresviso a look at the survey confirmed that the passages must be the same. Allowing for survey error they are only about 80 metres apart with the end of Bone Passage lying below Orange Arcade. Another question mark on the survey was therefore removed.

<u>Day Off Series (Should have had one)</u> This particularly nasty section of passage was noticed on one of our earlier trips into the cave. It begins as a crawling-sized phreatic passage leading off the bypass between the entrance to Orange Arcade and Boulder Hall. Unfortunately the passage soon closes down at a couple of small tubes. However off to the right a decorated squeeze led to a small chamber. A tight slot in the floor was noticed with a further 15m of steeply descending passage. This is an awkward thrutch with kit on the return. Beyond, a trickle of water sinks to the right with the main way on up and to the left. The whole area was completely covered in mud.

One person had probably reached this point and given it up as a bad job. Who wouldn't with huge stomping sized passages being discovered elsewhere. We continued on down to what looked like an impassable squeeze in the floor. Stones dropped down could be heard to fall for quite a distance. Spurred on by this, an awkward section of vertical squeezes was passed to enter a large fault controlled rift. We decided to return with plenty of rope as a I decided that forcing descending squeezes above a potential pitch was a little unwise without protection. The next day some pretty desperate squeezing reached the head of a pitch. I abseiled out over the pitch but was unable to reach the bottom due to a suicidal rub point on the pitch lip. A further return was made with a bolting kit to rig up a nice y-hang. The water levels in the cave were much higher on this final trip to Day Off Series and a waterfall could clearly be heard below. The vertical section of the pitch was measured at 14m and landed in a roomy, well decorated chamber. Water was falling out of an inlet 3m up on the left hand wall but the moonmilk on the walls meant that I was unable to follow the inlet upstream. Downstream the walking-sized passage eventually became choked by huge mud banks.

Inspection of the survey revealed that the passage was on a similar level to The Road to Wigan Pier. The water probably backs up in wet weather forming the large banks of silt. Unfortunately we did not have time to investigate the Wigan Pier streamway for a potential connection.

Back at the top of the pitch Joe had busied himself by digging into a series of small tubes, and getting extremely muddy in the process. These were all pushed to a conclusion but not surveyed. Most of Day Off Series was surveyed by Julie and Tim over several hours. Only a straight line survey, with no cross sections, was made. Below the vertical squeezes to the bottom of the mud banks was surveyed by Tim using a tape and compass.

The Derigging Trip All the kit was removed from the cave in one dramatic trip. Heavy rain over the previous two days meant that the river was in spate. We could even hear it from the camp site in Tresviso. The water was just touching the top of the dam at the entrance and had obviously been overflowing overnight. The upper entrance was sumped off so were forced to find a way upstream. Joe did the heroics by rigging up a traverse line on the right-hand wall. Luckily we were spared a final desperate move by investigating a hands and knees crawl off to the left. This actually proved to be a bypass to the horrible section of crawling everyone has been thrutching through for the last twenty years! I pity the bottle sherpas.

It was noticed that there seemed to be two distinct pulses of flood water in Agua. The first is relatively small and quickly follows a period of rainfall. An obvious increase in water flow was noted at the top of The Ramp where a small waterfall emerges. A second more significant pulse follows about 8 -12 hours later. We presume this is related to the pots high up on the Sierra del Corta with the water taking a much longer period of time to work its way through the system.

The Survey Much of the survey is relatively accurate although the complex area of passages in The Boulder Hall area should be treated with some caution. I have shaded passages in this area that lie at a lower level and which can be accessed without ascending The Ramp. The main streamway has been indicated by means of dots.

<u>Future Projects</u> The main goals of larger expeditions into Cueva del Agua will undoubtedly be to achieve a bypass to the Wigan Pier Sump, and to investigate leads at the far end. Our investigations revealed that there is potential for high level passages which might achieve the first goal. We left a number of minor leads which need following up at some stage:

- The descending passage found off Bone Passage in February has yet to be pushed to a conclusion.
- Connect the Wigan Pier streamway to Day Off Series. This will make investigation of the small inlet below the pitch much easier.
- Investigate high level passages off Boulder Hall found by LUSS in the 1970s. These may be related to the passage found half way down the 23m pitch.

(Team: Joe Frampton, Tim Francis, Joan Goddard, Julie Hesketh, Martin Rowe, Yvonne Rowe)

CAVING IN THE BOB MARSHALL WILDERNESS AREA

by Pete Hollings

Last Christmas whilst caving in Mexico, Peter Sprouse had reminisced about caving in the Silvertip cirque some twenty years ago, and had come to the decision that it was about time to revisit the area. On the last day of the trip, back in Austin, he showed me some of the literature on the area and I was forced to agree.

As the months went by Peter started tracking down the old survey notes from the area, and by August he had identified some 200 leads! We planned the trip to be a fairly small reconnaissance with a view to returning in force the following year, so checking all the leads was a little beyond our means...... we'd just have to do what we could. The plan was that we'd rendezvous at the trailhead (some 70 miles beyond the tarmac road) early on the morning of Monday 12 August. Unfortunately this didn't quite work out when I became delayed due to my attempts to hitch hike through Montana (but that's another story!), so we didn't meet up until 11am. "We" consisted of Peter Sprouse, Susie Lasko and Charley Savvas from Texas, Mike Miskol and Maria Hedrick from Montana, and myself.

We'd originally hoped that we would be able to make the 18 mile hike to our basecamp at the base of the Silvertip Cirque in one day. However, a late start, packs weighing in excess of 60 pounds and a general lack of fitness meant that this wasn't to be. The trail follows the Silvertip Creek for much of the way and is relatively easy going, except for Heartbreak Hill, which is a steep detour around a section of gorge. By evening we'd reached the point where the trail left the creek and with only two hours of daylight left we decided to bivouac for the night. The following day we continued along the trail heading up the side of the cirque. At one point the trail became a little indistinct, resulting in an hour or so of crashing through thigh-high bushes. Five hours later, we reached our camp at the base of the cirque, just above the main resurgence for the Silvertip cave system, which was our source of water for the next week. Mike and Maria arrived early the following morning, having bivvied on the hillside.

Wednesday was our first caving day, and after looking at the surveys Peter, Charley and I decided to head for Flakey Cave (the fact that it was only a ten minute walk from camp in no way influenced our decision!). The entrance to Flakey Cave is a low crawl at the head of a section of collapsed cave passage. Perhaps the most impressive feature was the howling draught blowing out of the entrance. This was a blessing while getting changed but was to become less appealing after a few hours underground. Charley measured the air temperature underground at 36°F (~2°C). After the entrance, the cave itself was pretty spacious, consisting mainly of walking passage with the odd climb or crawl. We followed the survey into the cave until we located our first lead, a 15ft climb. The climb was later to be described as "desperate" but was worth it, as it lead to a section of walking passage. We followed this, surveying as we went, over a couple of small climbs, one of which we tackled by building a substantial cairn at the bottom, and two fairly exposed traverses. We were eventually stopped at the start of some borehole passage, when the clinometer refused to function! A quick reconnaissance, to warm up, revealed that the borehole headed off to a large chamber. So, after six hours underground, we headed out having mapped some 250m of virgin passage. That evening Peter lead us on a tour of the entrances to the Silvertip System. We managed to locate most of the ones we were looking for, including the 6km long Blood Cave which is not yet connected to the main system, but does have the distinction of nearly making it through the mountain.

The following day two teams headed into Flakey Cave; Mike, Charley and I were going to map the main borehole that we had found the previous day, while Peter and Susie were planning to survey a substantial side lead. We were able to map the main borehole for some 250m, through a number of large chambers, until we called it a day in what was perhaps the largest chamber we'd seen. Although there was a low crawl leading off at floor level this did not seem to have as much air as the preceding passage, leading us to suspect that the way on was in the roof. This would be consistent with much of the cave where the way to find air was to stay high. Peter and Susie also had a good day, mapping their side lead for some 200m before stopping at a section of stooping passage. On leaving the cave, Maria, Peter and Susie had hiked up to the karst above Flakey cave and located a previously unknown, and still undescended, 20m pit that was blowing good air.

The next day we decided to forgo caving in favour of taking a hike over to the south cirque, in order to investigate the potential for caving over there. While a number of small caves have been mapped in the south cirque, the area remains virtually unexplored. It took us a couple of hours to get up to the saddle to the west of Silvertip Mt., from which we were rewarded with incredible views down into the south cirque itself. As our first goal we headed towards a large snowfilled sink, some 50m across. We located two entrances in the sides of this sink, the first was taking a stream from a melting snowbank, so we left it for a day when we all had waterproof caving suits. The second, Crumbly Cave, was mapped for four stations to a low crawl. From there we headed towards the east of the cirque to

try and locate some of the previously explored caves, however this was only a partial success. Our last goal was to head further east to the karst above the back of Blood Cave. As mentioned above this cave is nearly through the mountain so it was hoped that we could locate some pits that might drop into Blood. We did find one potential entrance but a lack of rope meant that it was left undescended.

Saturday proved to be our last in the cirque. Numerous injuries to feet and knees meant that the original plan of hiking out in one day was abandoned and instead we decided to allow ourselves two days. We left camp around noon and reached our camp in the base of the creek around five, having once again failed to find the correct trail, but at least now we think we know where it is, having eliminated two possibilities! That evening camp resounded to somewhat high pitched screams as a number of us braved the icy waters of Silvertip Creek for our first bath in five days. The next day we completed the hike back to the trucks in fairly good time and savoured the beers that we'd left in the vehicles, before heading to Hungry Horse for a celebratory meal.

As I write this article, Mike has returned to Silvertip with a group of Montana cavers to push some of the many leads we never checked, this time they are using pack horses to carry most of the gear up the hill! As for the rest of us we will definitely be returning to the Bob Marshall Wilderness next summer to continue the exploration of this fascinating area.



DISCOVERIES IN THE JUNGFRAU

by Ian McKechnie

We had chosen an area where the granite of the lower mountain slopes meet a layer of limestone. After a steep climb on rough rocky ground, we arrived at a promising-looking entrance, our altimeter showing about 2400 metres. Once inside, we couldn't believe our luck! The tunnel stretched upwards ahead of us into the distance, and it looked big enough to take a train! We pushed on for some time following the main lead. After about a kilometre, the passage opened out into a massive chamber. The main passage continued upwards from the far end of the chamber. To the left was a side-passage, from which there was a glimmer of daylight. We followed it for a short distance and found ouselves on a ledge in a massive north-facing wall of rock, with a breathtaking view over the valley two thousand metres below.

When we had taken all this in, we returned to the main route and pressed on, still trending upwards. We were becoming aware now that the air was thinning and breathing was becoming more difficult. After about two kilometres, we found ourselves in another gallery similar to the first, again with side-passages. We followed one of these passages and were even more surprised when it too emerged into daylight, this time in a south-facing rock face above a glacier, with a number of tunnels leading back into the mountain. We only had 150 metres of rope with us, so left further exploration of these passages for another day and returned to the main route. This continued for another 1.5 kilometres, when the system started to become more complex. We passed numerous chambers and side-passages, many of which appeared to be inter-linked. It was remeniscent of Swildon's entrance series, but on a much larger scale. Now for the first time too, we were seeing signs of water flowing, the majority of the system so far having appeared dry. After a cursory exploration of this area, we emerged on what appeared to be the top entrance, our altimeter showing 3500 metres. Near the entrance was a formation which we named "The Ticket Collector" because of its shape and position.

To our disappointment, we were also seeing signs that we weren't the first people here. The suspicion became stronger when a man approached and said: "大津ユゾグフラヴョッホ" which we believe is Japanese for "what time is the next train down?" After that, it didn't take much to conclude that we had 'discovered' the Jungfraubahn, a railway ascending through the heart of the Eiger to emerge high among the mountains at Jungfraujoch. Oh well, if we don't have a cave system to explore, we'll have to climb some mountains instead..........

Team: Ian McKechnie, Brian Snell, Geoff Barton