

Hong Meigui Yunnan 2005 Expedition

16th July to 14th August 2005



Cave expedition to Yunnan Province, China

Expedition Report



Hong Meigui Yunnan 2005 Expedition Report

Edited by Richard Bayfield

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Abstract

This report details the expedition carried out by members of the Hong Meigui Caving Club in Zhongdian, Yunnan Province, China. This expedition followed up on the prospecting and exploration of the Yunnan 2003 and 2004 expeditions, in order to continue to discover and survey caves found within a mountain range that has a potential depth range of up to 2,300 metres.

Yunnan 2005 was a 4-week, 13 person summer caving expedition to further explore the potential of the Zhongdian mountain range. This expedition involved a visit to the major resurgence found the previous year (C3-96/97, Lucky Benevolent Water) and to known and unexplored areas on the mountain plateau up to 2,300 metres above this resurgence. Major finds included the logging and exploration of 61 new cave entrances including a drafting sink with significant length potential (C3-338). Unfortunately frustrations with terminal chokes and flood prone caves prevented the expedition from making any significant progress on the depth potential of the area with Dawa Dong (C3-294) remaining the deepest known cave on the plateau at 131m.

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1. Overview

Richard Bayfield, Hilary Greaves

This report documents the expedition carried out by members of the Hong Meigui (HMG) Caving Club in Zhongdian, Yunnan Province, China during 2005. This expedition was a 4 week, 13 person summer caving expedition based between mid-July and mid-August. The brief aims of the expedition were to explore known caves and discover new entrances both on the 4,300 metre plateau between Zhongdian and the Jinsha Jiang (Yangtze River) and at resurgence level 2,300 metres below.

This expedition was based on the work carried out by the Hong Meigui expeditions of 2002 [HMG02], 2003 [HMG03] and 2004 [HMG04]. Following extensive reconnaissance work in 2002, a specific mountain range had been identified, just west of the town of Zhongdian, which looked particularly promising in terms of undiscovered caves. This mountain range attracted excitement because of its depth potential: rainfall on mountains of up to 4,500m altitude appeared to drain underground and reappear at known resurgences in and near the Jinsha Jiang valley at 2,000 – 2,200m altitude, making for a depth potential of 2-2.5km.

The 2003 expedition had camped at several locations in these mountains, searching for entrances, often with the assistance of the local seasoned yak farmers. While no deep going caves were found by the end of the 2003 expedition, many undescended shafts had been logged on a especially good-looking limestone plateau in the vicinity of Ye Kang village enticing a further summer expedition for 2004. Further finds included a major resurgence cave (C3-1; Shui Lian Dong) adjacent to the Jinsha Jiang and over 2,000m below Ye Kang village. Exploration had to be stopped after 200m due to dangerously high water levels, therefore demanding a winter expedition to take advantage of snow cover and greatly reduced rainfall (summer in Yunnan is the wet season with 90% of yearly rainfall falling between May and September).

The 2004 winter expedition returned to C3-1 and benefited from significantly lower water levels, therefore allowing further exploration of the cave. The team followed all leads to a conclusion, surveying the cave to a total length of 1,200m. A further find of great importance was an inaccessible resurgence (C3-96/97, Lucky Benevolent Water) which had a very large volume flow rate. The dry season flow rate was estimated at 7 cubic metres per second increasing to approximately 20 cubic metres per second in summer. The magnitude of this resurgence suggests a large drainage area extending to a sizeable section of the plateau over 2,000m above, further sustaining hopes of significant undiscovered cave development.

With a large number of open shafts on the plateau and a considerable resurgence located over 2,000m below, the summer expedition of 2004 was the first large scale expedition in the area, with 17 members for a period of up to 7 weeks. The Ye Kang area, identified the previous year as having great potential, came under sustained attack revealing a number of entrances, but notably less

than expected given the apparent quality of the limestone. The deepest of these, C3-69 (Subvertical Pot), attained a depth of 118m before succumbing to an impassable choke. A number of other entrances in this area were descended to circa 50m before meeting the same fate. Interest waned in this area following the discovery of a large shaft where stones would free fall for 5 seconds followed by several further seconds of rattle, 3 kilometres to the South. This cave (C3-294 – Dawa Dong) consisted of a superb circular entrance shaft of depth 110m, followed shortly by a rift pitch of depth 20m. This cave of impressive stature frustratingly pinched to a body sized (after some persuasion) meandering rift that was emitting a tantalising draft. Ten further hammering trips by members of the team gained a painful 5m of further progress before halting at an impassable right-hand corner requiring chemical persuasion.

The Summer 2004 expedition was able to prospect much of the plateau and surrounding areas throughout the time available, completing exploration of known caves such as C3-4: Gavin's Dong and C3-81: Yi Ye Qin Dong and finding many other significant caves such as C3-106: Nan Gan Dong, C3-195 and C3-268: Cold Cave as well as those mentioned above. However, with the deepest found cave (-131m) standing far short of the area's potential, the area was still resolutely refusing to reveal its subterranean secrets.

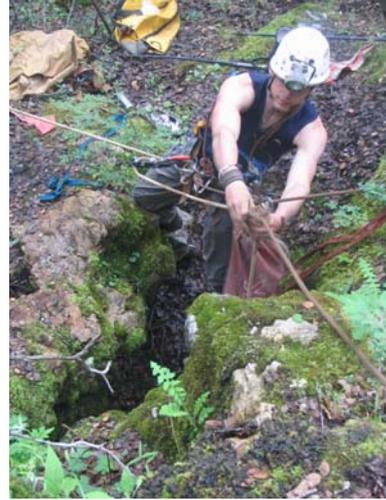
The 2005 expedition was initiated to try and find alternative routes into the large cave system projected to exist in this mountain plateau. The expedition began by exploring a known but unentered resurgence (C3-118: Na Pa; pages 37 to 39) and by prospecting the area to the north of Milk River. These initial forays, designed to aid acclimatisation at high altitude, revealed going cave in C3-118 but little else of speleological interest. The expedition, now acclimatised, turned its attention to the soaring limestone cliffs surrounding the large resurgence C3-96/7. One group approached this area by undertaking a plateau crossing in order to prospect the geologically significant (and more significantly painful) long straight valley (pages 39 to 43). The area surrounding the resurgence was found to be disappointing, providing very little in way of cave development with obvious exception to the inaccessible large resurgence located in 2004.

Frustrated with the lack of success at resurgence level, the expedition returned to the plateau in order to search for high level entrances. The expedition split into three groups to prospect areas identified as having excellent caving potential. The teams returned from their areas with varying success stories, ranging from gritstone caps and entrances blocked by villagers to protect their yak herds, to undescended shafts and a going stream sink left wide open at a pitch (C3-338 and the Hanging Valley). Vowing to return to the Hanging Valley later on, the whole team revisited Dawa's village and Ye Kang, embarking on a six night camp in order to try and break the depth record set the previous year. Many new shafts and cave entrances were found and previously undescended caves were dropped but all fell short of the depth of Dawa Dong.

The expedition returned to the Hanging Valley on the final week, dropping a number of shafts (C3-380 being the deepest) and pushing C3-338 (Hanging Valley Sink) to a part-flooded passage, still going and with a strong draft, but with the risk of flooding too great to continue exploration (pages 44 to 48).



*Rich preparing to rig C3-215
(Photo: JB)*



*Jon preparing to descend
YMCA cave, named due to
his dodgy choice of
cavewear! (Photo: JB)*



*Alys treading carefully in Napa Hai
Lake (Photo: JW)*



*Jon ascending the 10 metre
gallery pitch in C3-338
(Photo: JB)*



*Friendly local villagers on the
Zhongdian plateau (Photo: RB)*

2. Summary

Richard Bayfield, Hilary Greaves

Aims

Primary aim:

To find and explore deep caves in the Zhongdian mountains of Yunnan Province, China.

Objectives:

- To fully prospect and explore the area immediately above the large resurgence found in January 2004. The aim is to discover possible fossil entrances and abandoned dry resurgences. This will give us the opportunity of exploring from the “bottom-up” and may allow us to line up potholes on the plateau with significant development at resurgence level.
- To explore caves found and logged in 2004 that are yet to be entered or explored in their entirety. This should include C3-69 (Sub-Vertical Pot). This cave was believed to terminate at a depth of 118metres at a base of a pitch with no obvious outlet. Following analysis of video footage there appears to be a strong draft 25metres above the termination indicating at a cave many times deeper than surveyed.
- To carry out a plateau crossing, north of the areas investigated to date. A long straight valley provides an ideal route, and passes across geological boundaries where caves are reported to be located.
- To visit local families throughout the mountains during yak herding season, and to collate local knowledge regarding locations of additional entrances.
- To search for further high-altitude entrances, especially along geological boundaries, and in geological blocks found in 2003 to contain many entrances. (Boundaries near C3-81, between acidic soil and limestone, are of particular interest.)

Secondary objectives:

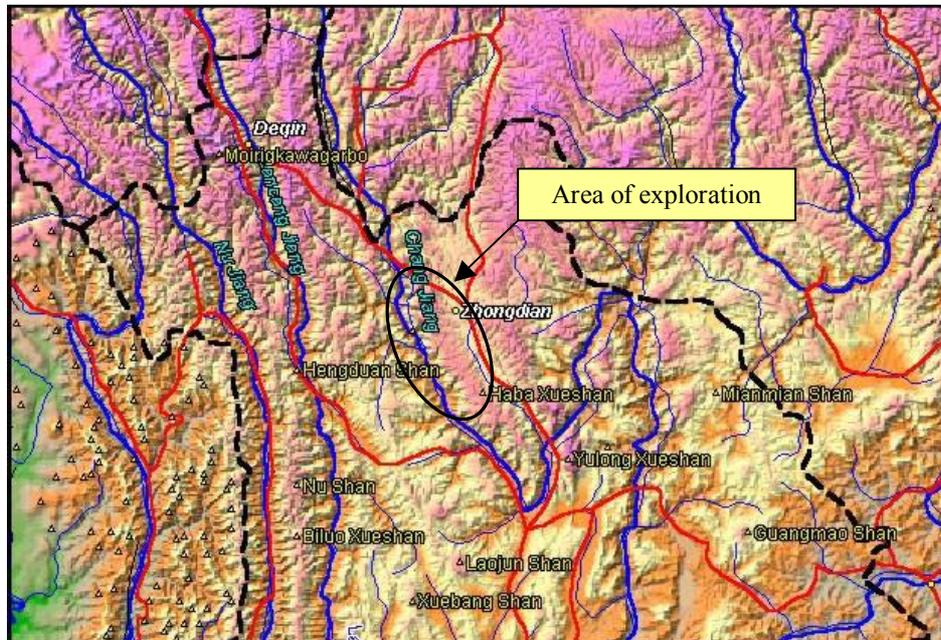
1. To assist the Yunnan University Department of Zoology, by collecting, preserving and submitting samples of high altitude cave life.
2. To encourage caving for sport and exploration among interested Chinese.

The expedition area

General

Yunnan province is located in southwest China. It shares borders with Vietnam (to the South), Burma (to the West), Tibet and Sichuan (to the North), and Guizhou and Guangxi (to the East). The expedition's main focus was in the North of the province. Here, the close parallel valleys of the Nu Jiang (Salween river), Lancang Jiang (Mekong river) and Jinsha Jiang (Yangtze river) run North-South, cutting deep gorges between mountain ranges whose summits are typically 4,000m and higher. This provides the steep relief that is (among numerous other factors) conducive to deep cave formation, and that partially underpins our high hopes for the area's deep cave potential.

This expedition focused on the mountain range that runs North-South between the valley containing the town of Zhongdian and that of the Jinsha Jiang (Figure 1).



Access to the mountain tops is easiest from the East. Relief at the West edge of the plateau is extreme, with a drop of over 2,000 metres from the mountain tops (4,000m to 4,500m altitude) down to the Jinsha Jiang (2,000m altitude) in a horizontal distance of 5-10km. The drop to Zhongdian (3,200m altitude) at the East edge is more gentle: a mere 800m drop for 5km horizontal.

From Zhongdian access to the mountains typically involved a taxi ride for the first 5km west across the plain and then ascending the mountain on foot to reach the target campsite.

Geology

As the Indian Plate pushes northwards into the Asian Plate, continental crust escapes sideways from the area of collision. This has created large fault systems that run south-eastwards from the Tibetan Plateau into Western China and Burma. Motion on these fault systems is predominantly by horizontal (strike slip) rather than vertical displacement. Numerous slivers of crust have been shunted past each other, with displacements of many tens of kilometres. The area visited by the Yunnan expeditions is caught up within these major faults: specifically the Red River and Dali fault systems.

An offshoot of the Dali fault system forms the valley occupied by Zhongdian, the expedition's base. In a big-picture view, faulting makes for a relatively complex collage of rock types, juxtaposed across the faults, rather than the spatially very extensive limestone platforms found in the classical karst of central China.

The expedition plateau comprises both Palaeozoic (i.e. 543 to 248 million years old) and Mesozoic (248 to 65 million years old) rocks, which outcrop in a north-south band which is 20-40km wide [WBR⁹⁸]. The Mesozoic rocks are dominated by impermeable mudstones. However, the Palaeozoic sequence contains thick intervals of limestone. In many places limestone intervals have been tilted so that their bedding is now nearly vertical.

Summary of findings

The main activities of the 2005 expedition can be summarised as follows:

C3-118: Na Pa and Napa Hai. The resurgence C3-118 was discovered on the summer 2004 expedition, described as a "Waterfall spouting out of hole in cliff" with visible, unentered, passage beyond. As this cave is located at an altitude of 3,288m, similar to that of Zhongdian, this resurgence presented an excellent opportunity to acclimatise and experience original exploration on the first few days of the expedition.

C3-118 involved a tricky 10m climb up to the entrance, rated at VDiff/Severe, requiring climbing gear to gain access. The resurgence, with an estimated outflow of 1 cumec, was accessed by following a network of fossil

passage and chambers above stream level for approximately 50m. Beyond this point the main streamway was gained and followed to a deep pool with a canal entering from the left. This canal was forced by the team for 25m, but was left still going due to the power of the stream in this section making further exploration too dangerous.

The team also found a number of large alcoves and small caves in the environs of C3-118, but nothing more of major significance. The team also located two further (inaccessible) sinks taking water from Napa Hai lake, one of which water was predicted to sink at 2 cubic metres per second. Combined with the Napa Hai sinks discovered in 2004, the combined outflow from this lake is predicted to be in excess of 10 cubic metres per second in the wet season. These sinks, many of which could be accessed when the lake is empty during the dry season, may reveal significant cave development (see “suggestions for future work” below).

Milk River Resurgence and Monastery Hill. The Milk River, running through the grounds of our expedition base, The Milk River Guest House, is shown on our maps to originate from the 300m high spur of land two kilometres to the North of the guest house.

On further inspection the river resurges from seven springs at the base of this spur, unfortunately none of which are accessible. Prospecting on top of the spur revealed open karst and limestone pavement but frustratingly very few cave features and no open entrances. Combined with no surface drainage, this area should have provided caving opportunities but was resolutely refusing to reveal them.



The Milk River (source at base of spur in the background) RB

Long Straight Valley Traverse. This valley, running from a col at UTM 47R 0555700 3081700 for a length of 10km to the large resurgence (C3-96/7) at UTM 47R 0548100 3075445, is conjectured to correspond with geological faulting and therefore could be of speleological interest. Members of the Yunnan 2004 expedition attempted to cross the mountains along this valley from the Zhongdian side but were beset by a degenerating path and illness of a team member.

Five members of this year’s expedition (RB, LD, SW, MB, JB) attempted to complete the traverse over a period of two days, taking a route over the Hanging valley above Napa Hai, over the col at the far end, and down the Long Straight Valley to the major resurgence C3-96/7. This traverse revealed open passage in the Hanging Valley - C3-338 (discussed in more detail below) as well as significant sinks, cave entrances and further speleological features in certain areas along the Long Straight Valley. Unfortunately only a cursory inspection of these numerous features could be undertaken due to the hugely challenging terrain presented by the Long Straight Valley. The path, clearly marked on our

maps, deteriorated to nothing after 4km, presenting the team with the only option of hacking through established vegetation and wading through rivers, both of which making progress painfully slow. No escape from the valley was possible due to cliffs on either side rising to 1,000m in places and camping could not be considered due to the thickness of vegetation. In total the Long Straight Valley (affectionately renamed Never Ending Valley) took 11 hours to traverse, and with no camping or escape possible, would make further exploration unfeasible.

C3-96/7: Lucky Benevolent Water resurgence. This resurgence, found on the Yunnan Resurgences expedition in early 2004, was of great interest to the expedition due to an estimated wet-season outflow of 20 cubic metres per second. It was hoped that this area would contain abandoned resurgences and fossil entrances, allowing exploration of cave systems from the “bottom-up”. With practically the whole team available, groups prospected the dry valleys to the East and South East of the resurgence and also at various levels on the Yangtze hillside to the North. The results of prospecting were particularly disappointing as very little in the way of cave features were discovered. On further inspection the immediate limestone cliffs in this area were found to be of a limestone which was not conducive to cave formation, therefore helping to explain this apparent lack of success. Due to the logistics of moving the whole team further down the Yangtze valley (half day road travel from base and very little by way of transport) it was decided to pursue the expedition closer to Zhongdian in areas where available geological maps display that carboniferous or Triassic limestone is prevalent.

C3-338: Hanging valley and Hanging valley sink (Area 1). This area, already noted as having cave potential earlier in the expedition, was identified as an area worth further prospecting following analysis of geological maps. Through conversation with local villagers a number of caves were identified in the area, including C3-380, a 7m deep shaft leading to a 16m deep rift which was choked with vegetation. The cave of particular significance in this area was C3-338 (hanging valley sink). The water sinking in the vicinity of this entrance is predicted to resurge at C3-118 (Na Pa), 1.4km to the south east and 185m below the sink. This cave, when first found earlier in the expedition, was sumped within 50m of the entrance. On a second visit this sump had completely drained away, allowing progress through a 6m deep U-tube which ascended up to a gallery overlooking a 10m deep pitch. Beyond the pitch and a further 5m climb down through perched boulders led to a large chamber 10m wide and over 10m high with an unstable boulder floor. Progress could be made beyond the chamber to an awkward 5m pitch dropping into a small streamway. Continuation was hampered at this point by a part-flooded section of passage of unknown depth. The draft here was very strong indicating significant passage beyond, but continuing exploration would have been extremely dangerous as, beyond the area known to sump, white foam was found on the ceiling in many areas, including the gallery above the 10m pitch. This cave definitely requires further exploration but this could only be feasible outside of the wet-season.

Southern Area (Area 2). This area, identified on geological maps as an area of good cave potential, was prospected by three expedition members (RK, SW, AM) over a period of three days. A number of small stream sinks were located, unfortunately all inaccessible, as well as groups of shakeholes but no cave entrances. Through conversations with local villagers, the group were taken to a nearby peak and were pointed in the direction of the nearest locally known cave entrances, 5km north in “Cavedale”, an area prospected by the 2004 expedition. This was frustrating for the group as the area, on paper, looked very promising for cave formation.

Far South Area (Area 3). This area, unexplored by previous expeditions, held promise due to our geological map showing that the area was of Triassic limestone, conducive to cave formation. Through prospecting, the area revealed a large number of shake holes and stream sinks but unfortunately no open or accessible cave entrances. Following conversations with the local population it appears that the few cave entrances in this area have been infilled to protect their yak herds from injury. Further to this, personal inspection of the geology of the area suggests that a gritstone cap is covering the Triassic limestone, again helping to explain the lack of open cave entrances.

Ye Kang and Dawa’s village. The plateau to the West of Ye Kang village is a massive Carboniferous limestone outcrop which should be particularly conducive to cave formation. This area, extensively prospected by the 2004 expedition, revealed a large number of entrances of which many remained unexplored. This was therefore an opportunity for the expedition to further complete the cave database for the area, find new entrances and hopefully break the depth record set the previous year. The surrounds of this plateau, particularly to the South and East of the village, also revealed significant cave formation. Of particular note was C3-294 (Dawa Dong), the deepest cave found so far at -131m and C3-51, a large stream sinking into a limestone outcrop which contained many shafts and cave entrances.

To further prospect and explore known and new entrances in this area the whole team camped at 4,000m in the vicinity of Dawa’s village (2km to the South of Ye Kang village) for 6 nights, allowing 4 full days for exploration. The results of this part of the expedition are summarised as follows:

- **C3-51 area (Top Sink, Hobbit hole & Mount Doom):** This area, centred around a significant stream that sank at the base of a large limestone cliff, was of interest due to the size of the sink (approx 0.25 cumecs) and the number of entrances known within the environs. The inaccessible sink faced a concerted attack in order to see if dry passage could be gained. A dam was built by the team, enabling location of the main sink hole, but was found to be too tight. A side outlet was also located which could be followed for 2m by clearing flood debris until this also became too tight.

A further cave of interest, C3-52 (Dragon's Arse), was discovered in 2003 but was not pushed to a conclusion. Katie, Alys and Ben revisited the cave, revealing a further chamber beyond a climb, to find that the cave terminated at a drafting choke 50m from the entrance.

Further finds in the area included a number of shafts, all of which were pushed to a conclusion, with depths up to 30m.

- **Ye Kang Plateau:** Although extensively prospected in 2004, a number of new entrances were found on this impressive limestone outcrop, namely C3-368 to C3-373. There were also a number of previously known entrances that had yet to be descended according to the current cave database of the area. Of particular interest included C3-215 (an 8m x 4m rift pitch with snow at bottom; undescended), C3-223 (3m x 2m tube to 6m pitch, followed by 20m pitch which has not been descended. Promising) and C3-307 (small shaft, undescended). C3-215 and C3-307 were pushed to a conclusion; unfortunately far short of depth expectations, and frustratingly C3-223 could not be located, even with GPS co-ordinates. Caves C3-368 to C3-373 were also pushed to a conclusion but again of no particular significance. Full details of these caves can be found in the cave database (Section 6). This area continues to frustrate Yunnan expeditions, promising much in the way of cave development but, as of yet, delivering very little.
- **Phone Signal Hill:** This 'hill', rising to 4,200m and found to the North East of Dawa's village, may have caving potential with three entrances logged but not descended that were found towards the end of the 2004 expedition. These caves, C3-297 to C3-299, were fully explored on this expedition and were found to choke not far below the surface. This hill is also pitted with a number of shakeholes, of which one when investigated revealed drafting passage below but was unfortunately too tight and unstable to descend (C3-379).
- **Area to the West of C3-294 Dawa Dong:** This area has been barely prospected to date and could promise much with enticing limestone pinnacles rising from an extensively forested area. A splinter group (JW, HP) went on a flash prospecting trip over a period of two days in order to gauge the potential of cave development in this area. Unfortunately, due to the density of the forest, and the lack of villages or a local population in this area, prospecting for caves was particularly challenging and was met with limited success. An un-notable exception was C3-378 which petered out after 15m. To conclude this area requires local knowledge in order to reveal its secrets.

Area immediately North of Long Straight Valley. This area, containing the highest mountain on the plateau (4,505m) had been identified on the Yunnan 2004 expedition as having promise due to the presence of Carboniferous / Devonian limestone, similar to that found in the Ye Kang area. Following a

flash prospecting trip on the last few days of the expedition, the area was found to be very promising with a number of cave features located. Of particular interest was a shale band, giving rise to a number of cave entrances along its length, and a stream sink that could possibly be enterable following dry weather. With these features discovered by two of the team (SF, KF) in driving rain and fog in just two hours the area certainly has promise and would warrant a second look with a larger team.

Expedition timing

As per previous expeditions to Yunnan in 2003 and 2004, the 2005 expedition was timed to coincide with the mountain yak farming season in Zhongdian. Yak farming families live in the mountains during most of July and August, and move close to Zhongdian for the remainder of the year.

The reason for this timing is that the majority of the significant caves found on the expedition have been shown to us by local farmers, and, as expected, we found it difficult to discover entrances on our own.

A further consideration was that this time of year was convenient for the team as it coincided with available holiday time for a number of expedition members whose occupations are in education or are studying at university.

One negative factor of this timing is that summer in Zhongdian coincides with the wet season in the area. This prevented the full exploration of a number of caves and also caused some disruption to the expedition (detailed below).

Weather

The expedition was called to a halt one day early following a severe weather event that prevented any further exploration. This weather event, 48 hours of heavy rain, caused landslides on routes into and out of Zhongdian and major flooding along the Yangtze River. The flooding, said to be the worst the area has seen for 20 to 100 years (depending on the source), washed away the major road from Zhongdian to Dali and left the Zhongdian to Lijiang road under several metres of water. This flooding left many of the expedition members stranded, but were fortunately assisted by the local government in organising replacement coaches immediately beyond the flooded section of road.

Suggestions for future work

Following this expedition and the previous expeditions of 2002, 2003 and 2004, the mountain range to the East of Zhongdian has now been extensively prospected but unfortunately very little success has been made in realising the true potential of the area. With large resurgences (namely C3-96/97) in the Jinsha Jiang valley and the almost total lack of surface drainage on the

mountain plateaux, there must be significant undiscovered cave development here which has of yet eluded the expedition members.

I believe that the logical step forward in Zhongdian cave exploration is to initiate an expedition outside of the summer “wet-season”. This will open up a number of very significant finds that are inaccessible following rain. These potential caves are as follows:

- C3-338. This cave, mostly phreatic in nature, takes a large stream which is highly reactive to rainfall due to its enclosed catchment area. As a result this cave sumps following wet weather and was therefore too dangerous to fully explore during a summer (wet-season) expedition. This cave definitely warrants further exploration due to the strong draft registered in the cave and that the limit of survey is 1.4km straight line from the limit of survey in Na Pa (C3-118), where the stream is expected to resurge. This cave therefore promises significant horizontal passage and a superb through trip if connected.
- C3-106 to C3-111. These large sinks are fed by Napa Hai, a lake that forms during the wet season near Zhongdian. These sinks are largely inaccessible when Napa Hai lake feeds them due to the obvious issue of flooding and the high risk of illness due to untreated sewage and medical waste being present in the water. Between December to June it is probable that these sinks will be dry offering good exploration potential based purely on the size of the entrances and the amount of water each sink takes (C3-109 has a predicted flow rate of $4\text{m}^3\text{s}^{-1}$). Much of this water is expected to resurge at Fisherman’s Pool (C3-134), approximately 3km to the North and 500m below Napa Hai.
- C3-96/7. This large resurgence, a pool with water resurging at a wet-season estimated flow rate of $20\text{m}^3\text{s}^{-1}$ from a borehole 2m below water level, can obviously not be accessed without full diving equipment. This resurgence, as well as other identified resurgences and sumps (i.e. resurgence C3-1), could warrant a cave diving expedition outside of the wet season in order to discover and explore any passage beyond.

Further to specific caves named above, an expedition during the dry-season where there is a light snow covering on the mountain plateau (more specifically October/November or spring), could reveal previously undiscovered cave entrances. This could be achieved by locating meltholes in light snow cover thus betraying entrances to caves of significant volume.

Possible objectives for a future high-altitude summer expedition could include:

- C3-69 (Subvertical Pot). This shaft system, currently 118m deep, requires further investigation for possible windows into parallel shafts. This follows video footage from 2004 showing a visible and

strong draft in the cave just 25metres above the termination of the shaft.

- C3-294 (Dawa Dong). This cave, currently the deepest found in the Zhongdian area at 131m, was left at a too tight corner in a hammered rift. This rift could be widened in order to follow the significant draft issuing from this rift.
- A full exploration of the Northern area briefly visited by SF and KF on the final days of the expedition. It is reported that there are a number of cave entrances adjacent to a clear shale band in this area, definitely warranting further prospecting.
- Dye-trace experiments between various known surface sinks and underground streams on the one hand, and the several known resurgences on the other. Of particular interest would be a dye trace experiment between: (i) C3-338: Hanging Valley Sink and C3-118: Na Pa; (ii) Various sinks in Napa Hai (particularly C3-106 & C3-109) and C3-134: Fisherman's Pool; (iii) stream in valley directly above C3-1 and C3-1. Our contact at Yunnan University has indicated interest in assisting us with such experiments.



Lou roped in to rescue practise at Buxton fire station (Photo: SF)



The view out of “the Dragons Arse” (Photo: AM)



The team enjoying the hospitality of the local villagers in the Hanging Valley (Photo: RB)



Drying kit at the Milk River Guest House (Photo: LD)



SW, MB, LD & RB outside C3-338 (Photo: JB)

3. Expedition members



AM	Alys “the bossy Tibetan” Mendus	Deputy Leader
BS	Ben “STUPID” Stevens	Tackle Master; Rescue
HP	Hugh “Janus” Penney	
JB	James “Who’s the Daddy” Bruton	
JW	Jon “Little Dippa” Witchett	



KW	Katie “Perfect Daughter” Froude	
LD	Louise “RICHARD” Dugan	
LH	Liu Hong	Field Agent
MB	Maxine “With Child” Bateman	Treasurer
ML	Martell “Tee Total” Linsdell	



RB	Rich “Woo Fwah” Bayfield	Leader; Grants
RK	Ruth “Shithead” Kerry	
SF	Simon “Just 3km More” Froude	Computers
SW	Steve “Wafer Thin” Whitlock	

4. Expedition diary

Yunnan 2005 Diary

Date	Summary
2005.07.07	BS,AM leave London amid the panic.
2005.07.16	RB,LD,MB,JB,JW,RK leave London
2005.07.16	SW flies separately from London
2005.07.17	BS,AM catch van to Guilin then train to Kunming
2005.07.17	RB,LD,MB,JB,JW,RK arrive Kunming. RB,MB,JW without luggage.
2005.07.17	SW arrives Kunming.
2005.07.18	AM,BS met at train station by LD,SW,RB,RK,JW,JB
2005.07.18	SW,BS,AM collect kit from Liu Hong
2005.07.18	AM,BS,RK,SW,JB,LD catch sleeper bus from Kunming to Zhongdian
2005.07.19	MB,JW,RB fly Kunming to Zhongdian.
2005.07.19	AM,BS,RK,SW,JB,LD arrive Zhongdian
2005.07.19	AM,BS,RK,SW,JB,LD,MB,JW,RB Gear sort out
2005.07.20	RB,LD,RK,MB,JB look at resurgences behind Milk River Guesthouse (MRG)
2005.07.20	AM,SW,JW,BS walk around Napa Hai
2005.07.21	RB,LD,MB,JB,SW set off on two day trek to resurgences
2005.07.21	AM,BS,JW,RK buy food/organise kit + transport
2005.07.22	RB,LD,MB,JB,SW arrive resurgences at 10pm
2005.07.22	AM,BS,JW,RK survey 50m of waterfall cave (C3-118) in high water conditions
2005.07.23	AM,BS,JW,SF take 4x4 to resurgences with kit. SF back to MRG
2005.07.23	SF,ML,KF arrive early in Zhongdian. Stay in MRG with RK
2005.07.23	AM,BS,JW,RB,LD,MB,JB,SW camp at resurgences
2005.07.24	AM,BS,SW,LD,MB,JB walk on HEP road, drink beer in valley and get lift back to camp

2005.07.24 RB,JW walk up steep hill behind resurgences

2005.07.24 SF,KF,ML,RK organise buying more food in Zhongdian

2005.07.25 LD,MB,JB,RB take bread van and all kit to Zhongdian

2005.07.25 AM,BS,SW,JW walk to road end and take bus (Y20!) to Zhongdian

2005.07.25 SF,KF,RK,ML Planned. Walked behind monastery

2005.07.26 AM,SW,RK head to area west of airport 'area2'

2005.07.26 BS,RB head to southern most 'pink limestone' area 'area3'

2005.07.26 LD,MB,JB,JW,ML,SF,KF head to hanging valley/village above Napa Hai 'area1'

2005.07.27 AM,SW,RK head up to next village and taken up hill (4350m) by Tibetan girl. Camp

2005.07.27 BS,RB prospecting area 3, then return to MRG

2005.07.27 LD,MB,JB,JW,ML,SF,KF prospecting area 1

2005.07.28 AM,SW,RK head down Cheddar Gorge to MRG

2005.07.28 BS,RB rest day

2005.07.28 LD,MB,JB,JW,ML,SF,KF return to MRG

2005.07.28 HP arrives from Vietnam

2005.07.29 LD,MB,JB,JW,ML,SF,KF,BS,RB,RK,SW,AM organise food and kit

2005.07.29 ML,SF organise horses with Daisy

2005.07.30 LD,MB,JB,JW,ML,SF,KF,BS,RB,RK,AM,HP meet horses and walk up to Dawa's. 4 horses arrive and we camp at Dawa's

2005.07.30 SW heads home via Lijiang/Dali and Kunming

2005.07.31 BS,LD stay at camp and await rest of horses

2005.07.31 AM,RK,HP,KF look for cave on limestone pinnacle ('The Fingers')

2005.07.31 RB,MB,JB return to previously logged caves

2005.07.31 ML,SF head up valley to 'Top Sink'

2005.08.01 AM,BS,KF,ML head up the valley to Top Sink and dam stream. AM,BS,KF prospect base of cliff face

2005.08.01 SF comes up to meet ML after meeting horsemen at camp for the highest dig in the world

2005.08.01 JW,HP leave early to check Jon's hole then return and play with Dawa's boy

2005.08.01 RB,LD,MB,JB,RK relocate and drop shafts on limestone hill area

2005.08.02 RB,JB drop C3-215 and go up 'Half Dome' hill

2005.08.02 AM,BS,KF,HP survey Dragon's Arse (C3-52)

2005.08.02 ML,SF,LD do 3 pots , 'Top Sink' area

2005.08.02 MB,RK stay in camp. JW rests and prospects 'Phone Signal' hill

2005.08.03 RB,JW go to Jon's dig on 'Phone Signal' hill

2005.08.03 AM,BS go and drop pots found last year on 'Phone Signal' hill (C3-297 + C3-299)

2005.08.03 SF,HP,MB,RK go and survey/push 'Friendly Pot', 'Top Sink' area (C3-)

2005.08.03 ML,KFJB,LD stay in camp

2005.08.04 LD,MB,JB,JW,ML,SF,KF,BS,RB,RK,AM,HP return to MRG from Dawa's

2005.08.05 Rest day

2005.08.05 AM,BS,KF,JW,HP,LD,MB,JB visit hot springs

2005.08.06 AM,BS,HP carry food up to Napa Hai camp (area1), then return to MRG

2005.08.06 KF,SF,ML,RK,JB,MB,JW,RB walk up and camp above Napa Hai (area1)

2005.08.06 LD rest day

2005.08.07 AM,BS,HP,LD survey notes/logbook day

2005.08.07 KF,SF walk to area Hils had identified

2005.08.07 RK,JB,JW,RB survey top entrance Napa Hai cave (C3-338)

2005.08.07 ML,MB return to MRG

2005.08.08 KF,SF return from Hil's area to MRG

2005.08.08 RB,JW go down muddy shaft. JB takes photos. RK rests

2005.08.08 AM,BS,HP,ML,LD sort/wash kit. MB rests.

2005.08.09 LD,MB,JB,JW,ML,SF,KF,BS,RB,RK,AM,HP sort/wash/post kit

5. Administration and logistics

Hilary Greaves, Richard Bayfield & Erin Lynch

Travel and equipment transport

Individual expedition members were responsible for arranging their own transport to Kunming. Most flew to Kunming on international flights via a number of operators. Two members of the expedition took the alternative option of flying to Hong Kong and then travelling to Kunming by train and sleeper bus via Shenzhen and Yangshuo.

Transport between Kunming and Zhongdian was by overnight sleeper bus (approximately 16 hours) or by internal flight.

The expedition accessed the mountain range directly from Zhongdian. This required crossing a 6km wide plain between Zhongdian and the start of the ascent. Roads criss-cross this plain, serving local villages. On outward trips (i.e. from Zhongdian to the mountains), we used taxis/minivans (easily hired on the streets of Zhongdian) for transport across the plain. On the return trips transport was often gained by hitching.

Equipment from the UK was carried to China with expedition members. This stretched our standard international personal baggage allowances to, but not quite beyond, their limits. This was possible only because the expedition had access to the existing Hong Meigui tackle stores in Guilin, Guangxi province. Before the expedition commenced, a vast quantity of equipment was posted from these stores to our field agent in Kunming. Valuable and breakable items were collected from Guilin and transported by train to Kunming accompanied by expedition members. Expedition equipment was then transported to Zhongdian by sleeper bus, again accompanied by members of the expedition. At the end of the expedition a local store was created for Yunnan specific equipment in order to reduce shipping costs for future expeditions to the area. All non breakable equipment (required for other Hong Meigui expeditions) was shipped back to the Hong Meigui stores. Breakable or valuable equipment was taken back to Guilin by bus and train, accompanied by expedition members.

When transporting large amounts of equipment between Zhongdian and the mountain camps, the expedition hired horses from villages on the Napa Hai plain or (for downhill trips) from mountain farming settlements. We paid RMB100 per horse for a full hire day.

Money

Chinese currency is Renminbi (RMB), also known as ‘Yuan’. At the time of the expedition, the exchange rate was approximately RMB14 to GBP1.

Food and Accommodation

In Zhongdian the expedition set up a base at the Milk River Guesthouse, a Tibetan-run guesthouse in the North of the town. Here we paid RMB15 (on average) per night per person. The expedition was also given access to a small room for equipment storage for the duration of the expedition. When in town, the expedition ate traditional Chinese or Tibetan food at local street cafes: typically RMB4 per person for breakfast, RMB7 per person for a full meal. Both cheap accommodation and cheap food are abundant in the town.

In the mountains the expedition carried 2-man tents and, for the most part, camped, eating standard camp food (supplemented with fresh vegetables) bought in Zhongdian. On occasion we were invited to eat with the local yak herding families in their homes on the mountain plateaux.

Permission and permits

Travel in China requires a tourist visa. This is obtainable (in the UK) from the Chinese Embassy in London, or Consulate in Manchester, for a GBP30 fee.

The expedition carried an official letter of invitation from Yunnan University; no further permission was required for this expedition.

Vertical caving

Exploration of vertical caves used single rope technique (SRT), usually on 9mm rope. All expedition members were experienced cavers already well versed in this technique. Details of both equipment and technique are given in, for example, *Caving Practise and Equipment* by David Judson [Jud84].

Documentation

Recording of entrance locations

Whenever possible, entrance locations were recorded by means of GPS (Global Positioning System). Readings were recorded as UTM grid coordinates, using the WGS84 datum parameters. The UTM zone is 47R. Photographs were taken of all logged cave features and entrances to aid future location of the sites.

Cave surveying

All significant finds were surveyed to BCRA Grade 5b or to the highest reasonable standard given the conditions. Small caves with no potential were surveyed to Grade 2. The expedition used precision sighting compasses (Suunto KB-14/360, Silva Model 80) and Clinometers (Suunto PM5, Silva Clinomaster) as cave surveying instrumentation. Copies of all cave surveys can be requested from Hong Meigui CC.

Photography

Members of the expedition carried simple cave photography equipment (SLR/digital cameras, small flashguns and slave units). Expedition photographs (both surface and underground) have been collected and placed online at: http://www.hongmeigui.net/~hmg/photos.php?expedition=yunnan2005_1

Communications

In order to cover the greatest possible ground in the time allocated, the team was often split into 2 or 3 groups of three or more people in order to prospect different areas more efficiently. Each team had access to at least two personal mobile phones (with UK SIM cards) owned by individual team members. The intention was to keep the expedition updated by means of text messaging. This system was met with mixed success as the terrain dictated the level of reception signal (if any) the teams could receive. As a result, to maximise the chance that messages would be received by other teams, messages were sent to multiple mobiles and confirmation of receipt would be sent by the receivers.

Due to the high potential of failure in this communication system a strict callout system was put into place by the expedition. This involved each team detailing in the logbook and callout board the area visited (including grid coordinates), the route travelled and the expected time and date of return. In order to maintain safety all groups undertaking overnight trips were not less than three people in size and had access to mobile phones.

Research materials and information sources

The Yunnan 2005 expedition relied heavily on the firsthand knowledge gained from previous HMG expeditions to the area between 2001 and 2004. This information included details regarding infrastructure, culture, places to stay, cave guides and areas to prospect etc. Also of assistance were three team members present who have attended previous expeditions within the area. Further relevant information was gained from Hilary Greaves, the leader of previous Yunnan expeditions and from Liu Hong, the expedition's field agent.



Lucky Benevolent Water resurgence (Photo: JW)



The limestone plateau to the North of Dawa's village (Photo: MB)



The city of Kunming (Photo: JW)



Colourful market stalls in Zhongdian (Photo: AM)



Zhongdian monastery (Photo: RB)

6. Cave Locations and Descriptions

(Please refer to the Yunnan 2003 and 2004 reports for full names of members from previous expeditions)

⊗C3-52 Dragon's Arse

Location: At the base of the cliff on the left side of the valley (looking down) that leads from the 'top sink' area.

Description: An impressive 8m wide x 10m high entrance with a higher entrance. A scree slope leads steeply up for 15m. On the left a passage is visible which has not been entered. This would require either a very slippery climb or a traverse to enter. A 3m climb bearing left with a slight water stream enables a ledge to be obtained with a traverse right to enter a smaller passage. This continues into a small chamber 4x6m. An awkward climb up on (loose) boulders gains the final chamber with a discernable cold draught but is sadly choked. *BS, AM, KF, HP (2005)*



⊘C3-118 Na Pa (Waterfall cave)

Location: UTM 0560898 3083794 alt 3272m. The cave is located on the eastern edge of Napa Hai. It is not visible until almost reached due to being in the corner of a valley just through a Tibetan village

Description: A large waterfall (~1 cumec) issues from a cliff with two entrances visible. A climb up the left hand side (climbing grade VDiff-S) leads to the lower and further right of the two entrances.

There is a spit in place here which serves as a runner for the first person and a reelay for SRT. The climb continues into the entrance and there is another spit at the top low down on the left hand side of the passage. Rigging for SRT requires a 25m rope.

Back to the left about 5m is the second entrance, an 8m wide x 10m high entrance.

The main passage continues (guano) for about 10m to a sharp left turn and a climb down into the stream. The main flow is crossed and a 3m climb up leads into a bat roost. Up to the left is a tight passage with a draft that probably emerges back onto the cliff face.

The stream is regained by a 3m climb down. After 10m a deep pool is reached with the water entering from a canal on the left. This is the limit of the survey. Progress can be made along the canal depending on water levels and it has been pushed for 25m and still continues. *PT, FL, RGe (2004); SW, BS, JW, AM (2005)*



⊗C3-203

Location: UTM 0554182 3072472 Alt. 4185m. On the limestone hillside between The Fingers and Half-dome.

Description: 6m blind shaft with a snow plug at the bottom. *AA (2004); RB, JB, LD, MB, RK (2005)*

⊗C3-215

Location: UTM 0553806 3072659 Alt. 4167m. At bottom of broken rock slope on left, looking up, out of gully.

Description: 6m by 4m wide entrance in the middle of a scree slope. First pitch an hourglass shaped shaft to a snow plug sloping downwards to second pitch head. Second pitch drops 15m into a chamber 7m wide and up to 15m high. Cave ends in a choke. *AA (2004); RB, JB (2005)*



Rigging:

Pitch	Rope	Rigging
1 st (P15)	45m	Main belay from limestone pinnacles at pitch head, two rope protectors required.
2 nd (P15)		Bolt rebelay at head of 2 nd Pitch. (rope continues from entrance shaft).

⊗C3-297 **Lion's Pit Pot**

Location: On the southern side of phone signal hill near summit ridge.

Description: 5m vertical pot. 4m diameter. Rigged off rhododendron bushes as limestone too friable. Connects through to C3-298 with a passage 2m long, 2m high and 0.75m wide. *SFr, HG (2004); AM, BS (2005)*



Rigging:

Pitch	Rope	Rigging
1 st (P4)	20m	Y-hang off nearby rhododendron bushes. Rope protector required.

⊗C3-299

Location: UTM 0555878 3071705 Alt. 4216m. Base of rocky outcrop, on eastern flank of phone signal hill.

Description: 3m wide by 1m high entrance leads to a 10m crawl over shattered rock, to a 4m by 8m wide chamber with flowstone where it is possible to just stand up. A 1.5m shaft drops into the entrance crawl after 2m. *SFr (2004); AM, BS (2005)*

⊗C3-307

Location: UTM 0554779 3071889 Alt. 4161m.
Near top of a limestone summit.

Description: 5m deep blind shaft. *RB, CJ (2004); RB, JB, LD, MB, RK (2005)*



Rigging:	Pitch	Rope	Rigging
	1 st (P5)	10m	Main belay from Rhododendrons, deviation from rhododendron on pitch head.

∅C3-338 Hanging Valley Sink

Location: UTM 0559500 3084000 Alt 3460m. Below prominent cliff in Hanging Valley, to left (S) of logging track from col above Napa Hai to Long Straight Valley. Entrance is through boulders at the base of the cliff to the left of the obvious pitch (C3-350 Horse Cave)



Description: Descending through boulders leads to a small chamber with a wet weather stream issuing from a too tight hole (C3-350).

Following the passage downstream the cave descends through a number of climbs to a 7 metre deep U-tube which is completely sumped in wet weather. *To the right just before the u-tube is a climb up into a tight passage which can be followed up two further climbs and down a muddy tube into a wet weather perched lake. Following a dry period this lake can be by-passed and the ensuing passage can be followed back to the entrance.*

Past the U-tube the passage continues up a very slippery 60° climb to a gallery overlooking a 10m pitch. Descending the pitch leads to a chamber of perched boulders which can be carefully descended to a large chamber with an unstable boulder floor. Crossing the chamber a passage can be followed through boulders to an awkward 5m pitch. Beyond this pitch the passage rejoins the stream to a duck with a very strong draft. This duck can only be feasibly negotiated in the dry season due to the high risk of flooding beyond the U-tube. The water from this cave is expected to resurge at C3-118, 1.4km to the south east of C3-338 and 185m below the entrance. *RB, JB, JW, LD, RK, SW, MB, ML*

Rigging:	Pitch	Rope	Rigging
	Gallery	15m	Numerous natural belays at pitch head.
	Pitch (P10)		Extremely sharp rocks, protection required (10m ladder preferable)
	2 nd (P5)	12m	Y hang off stable boulders 3m from pitch head. Rope protector required.

⊗**C3-341 Yak Bone Cave**

Location: UTM 0562471 3079569 alt 3300m. Up steep bank looking across Napa Hai.

Description: Cave mouth 10-12m across, 2m high, lowers to 0.75m and 7m wide after 7m, where it turns a corner going to a 0.75m high chamber. Many animal bones. *SW, BS, JW, AM*

⊗**C3-342**

Location: (Adjacent to C3-341 – See above).

Description: 10-12m wide, 3m high entrance goes 12m to 0.75m high choke. Evidence of use as a store. *SW, BS, JW, AM*

⊗**C3-343**

Location: 20m east and 20m above GPS reading.

Description: Cave 4m high and 3m wide. Choked at 5m. *SW, BS, JW, AM*

⊗**C3-344**

Location: 3m from plain in limestone cliff.

Description: Fault formed cave. *SW, BS, JW, AM*

⊗**C3-345**

Location: On N-NW side of Napa Hai.

Description: Sink. No obvious passage. *AM, BS*

⊗**C3-346**

Location: On N-NW side of Napa Hai.

Description: Rocky alcove that looks like a sink but has no movement of water. *AM, BS*

⊗**C3-347**

Location: On N-NW side of Napa Hai.

Description: Napa Hai important sink. Cave entrance lost under quarrying spoil, but water sinks at ~2 cumecs. *AM, BS*

⊗**C3-348**

Location: At base of hill behind the Milk River Guesthouse.

Description: Six inaccessible resurgences that combine to form the Milk River. *RB, LD, RK, MB, JB*

⊗**C3-349**

Location: On hill behind Milk River Guesthouse.

Description: Choked sink hole. *RB, LD, RK, MB, JB*

⊗C3-350 Horse Cave

Location: Area 1. In a cliff in a depression on the south side of the hanging valley.

Description: Short pitch to rubble floored cave, visual, too-tight, connection with C3-338. *SW, RB, LD, MB, JB,*



⊗C3-351

Location: On track connecting hydro-electric plant with resurgences dam.

Description: Two alcoves on quarried track. a) 2m above track, 3m wide by 3m long by 2.5m high, b) at level of path, 1m by 0.75m by 2m. *AM, BS, SW, JB, MB, LD*

⊗C3-352 Lou's Perch

Location: In Jin Sha Jiang valley, near Lucky Benevolent.

Description: 1.5m wide by 2m long by 0.5m high alcove. *AM, BS, SW, JB, MB, LD*

OC3-353

Location: From Grid: 694 857. In valley behind monastery, 50m up from the path at an angle of 45 degrees from the top of the quarry.

Description: Obvious entrance. *RK, ML, KF*

⊗C3-354

Location: In valley behind monastery, on the path and in line with C3-353.

Description: Inaccessible spring resurgence. *RK, ML, KF*

OC3-355

Location: From Grid: 700 867. In valley behind monastery.

Description: Possible entrances. *RK, ML, KF*

⊗C3-356

Location: On hill top.

Description: Dry sink, 4m deep and 12m wide. *AM, SW, RK*

⊗C3-357

Location: Area 2. Below deserted village.

Description: Small resurgence through mud into the main stream. *AM, RK, SW*

⊗C3-358

Location: Area 2. Below deserted village.

Description: Resurgence, slightly bigger than C3-357. *AM, RK, SW*

⊗C3-359

Location: Area 2.

Description: Obvious inaccessible sink on top of hill plateau. *AM, RK, SW*

⊗C3-360

Location: Area 2.

Description: 15m round, 1.5m deep inaccessible sink. *AM, RK, SW*

⊗C3-361

Location: Area 2. Very close to village.

Description: 100m by 70m by 10-15m deep sink. *AM, RK, SW*

⊗C3-362

Location: Area 2. 100m NW of GPS reading.

Description: 2 large alcoves with signs of human habitation. *AM, RK, SW*

OC3-363

Location: 250m downstream of C3-362 in RHS of gully in cliff face. 15m up from valley bottom.

Description: Obvious entrance. Some potential. Bolt climb to entrance. *AM, RK, SW*

⊗C3-364

Location: On opposite side of stream to C3-363, on same fracture line.

Description: 8m long, 12m high, 3m wide shelter cave. Arrow at entrance. *AM, RK, SW*

OC3-365

Location:

Area 2. Downhill of C3-364, 60m up from valley floor in limestone cliff on LHS.

Description: Cave mouth with little potential. Access difficult. *AM, RK, SW*

⊗C3-366

Location: Near bottom of Cheddar Gorge. On the LHS looking downstream.

Description: 4m wide, 3m high, 6m long rubbish tip. *AM, RK, SW*

⊗C3-367 Prayer Flag Cave

Location: Near bottom of Cheddar Gorge, up scree slope, on the LHS looking downstream. Visible by flags.

Description: 3m wide entrance. *AM, RK, SW*

⊗C3-368

Location: At edge of rhododendrons on lower slopes of Fingers Mountain

Description: Area of 4 small, sharp sinks. All 1-1.5m deep, average 4m in circumference. *AM, RK, HP, KF*

⊗C3-369

Location: At edge of forest on the limestone hillside north of Dawa's.

Description: A small loose cave mouth slopes 30 degrees downwards. The passage enters through boulders to a dug open squeeze over a tight 5m pitch. Further passage leads to a 5m rift pitch and a boulder choke. At the bottom of the unstable rift is a blocked chamber with a large inlet to just below the surface. *AM, RK, HP, KF, RB, LD, MB, JB*



⊗C3-370

Location: Hanging valley below summit ridge of Fingers Mountain

Description: <Not available> *AM, RK, HP, KF*

⊗C3-371

Location: On ridge plateau below Fingers Mountain

Description: Fracture cave in limestone plateau. 3m deep, 2m long by 0.5m-1m wide. *AM, RK, HP, KF*

⊗C3-372 Katie's Hole

Location: On hillslope facing Dawa's on Fingers Mountain

Description: Person sized hole. 2m deep along a bedding plane continuing at the bottom for 4m horizontally ending in a mud blockage. *AM, RK, HP, KF*

⊗C3-373

Location: Lower slopes of Fingers Mountain facing Dawa's

Description: Small entrance to a dig. 2m high by 1.5m, goes back 2m and 1m deep to boulder choke. *AM, RK, HP, KF*



⊗C3-374

Location: Holes in steep limestone cliff in Dragon's valley west of Top Sink Area

Description: Two alcoves at bottom of cliff. a) 4m long by 1.5m high. b) 2.5m long by 1.5m high. *AM, BS, HP, KF*

⊗C3-375

Location: Area 2. Very close to village.

Description: Soak away fed by spring. *AM, SW, RK*



ØC3-376 Yak Pot

Location: 100m south down hill of Top Sink, C3-52, area.

Description: A vertical shaft 3m in diameter is plugged with snow at 5m - possible tight continuation beyond. *ML, LD, SF*



⊗C3-377 Dinky Dong

Location: Up hill, south west of C3-376, 100m south down the valley from Top Sink C3-51.

Description: 3m drop, lifeline needed. Tear-dropped shaped shaft. T shaped continuation passage choked. *ML, LD, SF*

⊗C3-378 Widget's Wookey

Location: UTM 0553189 3072552 Alt. 3923m. Down the valley from Dawa's, beyond the ridge of Half-dome.

Description: 9m long, 1.2m high crawlway descends short drop and ends in choke. *JW, HP*

⊗C3-379 Jon's Dig

Location: UTM 0555947 3071753 Alt. 4039m. On phone signal hill.

Description: Shakehole with unstable dig. *JW, RB*

⊗C3-380 YMCA Cave

Location: 4km from Napa Hai campsite along yak track. 25m off trail.

Description: Shaft descends as a 23m pitch split by a ledge. After the first 7m a loose debris/mud slope is encountered to a further pitch which continues down to blocked rifts at the bottom with no way on. *RB, JW, JB*



Rigging:	Pitch	Rope	Rigging
	1 st (P7)	30m	Main belay from numerous trees at pitch head, deviation from branch overhanging entrance.
	2 nd (P16)		Natural thread below head of 2 nd Pitch. (rope continues from entrance shaft).

ØC3-381

Location: Obvious entrance in the side of large shakehole, approximately 100m east of river sink (C3-383).

Description: 2m x 1m opening to 8m pitch into chamber. No draught. Undescended. *BS, RB*

⊗C3-382

Location: One of the many large shakeholes to the east of the river sink (C3-383).

Description: Choked shakehole in-filled by locals. Locals state that there was previously a pitch here of approximately 10m depth. *RB, BS*

⊗C3-383

Location: Obvious river sink in sunken valley to the east of small village.

Description: 5m waterfall drops into pool with inaccessible sink. Flow rate ~0.4 cumecs. Water visibly sinking. Digging required. *RB, BS*

⊗C3-384

Location: Adjacent to camp site in small sheltered valley.

Description: Stream of ~ 0.2-0.3 cumecs flows into pool and sinks. *BS, RB*

⊗C3-385

Location: Obvious shakehole on cliff above C3-384.

Description: 3m deep shakehole. Water sinks through fist-sized rocks. *BS, RB*

⊗C3-386

Location: Depression by cliff on the SW corner of flat plain.

Description: Small stream sink. *RB, BS*

⊗C3-387

Location: In cliff face on west side of valley, 50m above valley floor.

Description: Rock alcove. *SW, RB, MB, JB, LD*

OC3-388 to C3-393

Location: In Long Straight valley.

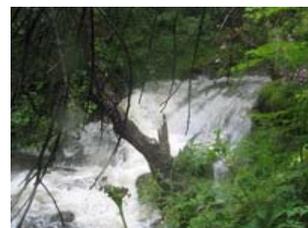
Description: C3-388 to C3-393 all small entrances with little chance of significant development. Unexplored. *SW, RB, MB, JB, LD*



OC3-394

Location: In Long Straight valley.

Description: Significant stream but unable to progress through the undergrowth to potential resurgence. *SW, RB, MB, JB, LD*



⊗C3-395

Location: Stream in Hanging Valley.

Description: Stream disappears next to two conglomerate boulders blocking any entrance into the sink. *SW, RB, MB, JB, LD*

⊗C3-396 Halfway House Cave

Location: Long Straight valley, in broken limestone cliff face.

Description: Large cave resurgence. No potential. *SW, RB, MB, JB, LD*



OC3-397

Location: Long Straight valley. Cave entrance 20m above valley floor

Description: Large fossil cave resurgence with stal visible in entrance. Inaccessible without aid climbing kit. Some potential. *SW, RB, MB, JB, LD*

OC3-398

Location: Long Straight valley. 100m downstream of C3-397.

Description: Possible fossil resurgence, unentered. *SW, RB, MB, JB, LD*



⊗C3-399

Location: In area 2 at bottom of cliff face on Ye Ka mountain. In a clearing where logging is in progress. To the NE the hill falls steeply into Cave Dale and Cheddar Gorge.

Description: Impressively large sink. 150m diameter. Unenterable. *AM, RK, SW*



∅C3-400

Location: From Grid: 518 895. 7 hours uphill from Hanging Valley.

Description: Sink. Can hear air. May be accessible in dry weather. *SF, KF*

⊗C3-401

Location: From Grid: 689 887. In valley behind monastery.

Description: Number of small alcoves. *ML, KF, RK*



7. Stories

The articles in this section were written by expedition members in order to tell the day-to-day activities of the expedition from a personal point of view. No apology is offered for strong language, political incorrectness or incomprehensible cavers' slang.

My Magical Day in Yunnan: 20th July

Alys Mendus.

Yesterday was a magical day. Ben Stevens, Steve Whitlock, Jon Widget and I decided to walk all around Napa Hai (big marshy plateau) to look for any sinks and see where all the water might drain. We set off through town and chatted to lots of locals. After our crash course in Chinese in Yangshuo and our handy phrase books Ben and I are becoming pros!!! Haha. Well we try. I still make great mistakes when haggling with the locals over half a Y and 5Y notes!!



Napa Hai (RB)



Ben, Alys & Steve prospecting (JW)

As we left the town there were lots of attractive Tibetan farms and the odd cave entrance to record but nothing more than a few metres. It rains a lot here so we took refuge with some friendly Tibetan builders and had a chat.

Then carried on round a bluff and saw a lovely bit of limestone!! Our eyes lit up and saw a Tibetan house built into the side of the cliff, into an alcove. Lots of Tibetan women emerged and we tried to

ask them could we look at the caves by their house but they insisted we came inside. This was a true anthropogenic dream.

The women - one old, 3 others 17, 23 and ? (see how good our Chinese is getting!!!) were all dressed in Tibetan clothes and as it was pouring with rain we sat round the fire. The hut was designed with a raised area with blankets for sleeping at one end and then a big central fire with a steaming rack above with large lumps of yaks milk cheese. There were benches around the fire and then a wooden work surface at the back. At the back of the room behind a wicker fence in the rock alcove of the cave was a pen of animals. I had been looking at the ladies headdresses all day in town and wanted to try one on. So I tried my best Chinese chat up lines and told the girl how beautiful it was and took off my

stripy NZ head scarf and she gave it to me to try on. The older lady plaited my hair and put the head dress on - we got some photos!

Then they decided that they must feed us! I had both the younger girls around me talking nineteen to the dozen and me attempting to understand. By the end they knew I was a teacher, I was 25 and that I lived in England. Also that I had a sister who was 23 and was a student. They found out that the boys were my friends and that they were neither my dad nor my husband!!

We then were given a delicious yak milk yoghurt (like French set yoghurt) with toffee! It was an amber lump that looked like it must have been boiled up sugar and then hardened which they grated into the yoghurt. I got shown how to mix it in and we ate it with unleavened bread. Then it was time for tea!! They mix up the butter just like someone making the milk for a latte!! The water is strained through the tea and then the frothy butter added. It is actually quite nice and wasn't too salty.



Alys and her new headdress (JW)

We were shown another way to eat it is to put flour in with the tea to make a dough and to eat it with yak cheese and toffee. We were also given lots of yak cheese to eat. We decided to go after about an hour but I would have loved to have stayed longer! We were stuffed and we knew they would keep feeding us!! We had little to give in return except an English 2p piece and some dried tofu.

The best part of the visit was when I returned the headscarf the two girls grabbed my hands and took me off alone out of the house to a cave entrance. They wrote a sign in Chinese on the floor and one began to scramble up beckoning for me to follow. It was quite awkward as the limestone was polished and she got up quite high and turned around and beat her chest. I copied lower down but she shook her head and came down and sent me up to the high place and I had to bang my chest. We then returned to the ground. I was totally blown away. The boys were not invited so it seemed like some sort of initiation rite - or Buddhist - they had a shrine in their house. I felt very light headed and strange. I gave them both a hug in an English way as I could not think of anything else to do to show my emotions as I barely understood our earlier conversations.



C3-118: Na Pa (AM)

We all wondered off - or more like floated off onto the plain....

And then we did find a cave that goes about 100m or so. So it wasn't a bad day!! We saw this white scar about 5km away and when we got there it was a BIG resurgence so we hiked up and Ben Stevens did some exposed leading on a

rope harness on semi static rope!!! and bolt putting in and we were in! Lots of bats live here! So far it turns a corner into a canal and continues – we are returning tomorrow to survey.

Then we walked back over Napa Hai (AKA Nappy high) as it is where all the town waste goes - not pleasant when you are wading thigh deep in it!! Yummy. Then we hitched back to town by about 9pm after at least 24km of walking and exploring!!! Woo hoo.



*Alys wading in Napa Hai
(JW)*

Up and Over into Long Straight Valley (Never Ending Valley): 21st – 25th July

Louise Dugan

Trekking to Long Straight Valley was RB's idea and to this day I still hold him responsible. Our adventure started at the canteen, a conveniently situated local caf named so due to its dirty floors and ability to cater for large numbers of ravenous cavers. Then flagging a passing Bread van we kicked the drivers mate out so there was enough room to take us and our kit out of town to where the mountains rise up out of the plain at the foot of Napa Hai Lake. On dropping us off our richer and grinning driver helped me on with my pack and pointing to my weedish girl muscles did the thumbs up. Assuming he thought my pack was weighty I strode off beaming with a spring in my step, an expedition virgin, oh how little I knew!



Resting with the locals (JB)

To enter hanging valley we climbed a steady 150m in less than a mile along local tracks to a pass onto the start of the mountain plateau. A walk in the country in the UK, however at 3200m even a stroll to the latrine will leave the unacclimatised gasping. As you can imagine MB was most relieved when a couple of young male herders strapped her heavy load on to one of there sturdy ponies! I slogged my way to the pass, stubborn as ever to be rewarded with the still picturesque view of rain showers moving across Napa Hai Lake and the far-reaching expanse of gazing pasture dispersed with woodland, huts and working yaks that made up our trail.

En route to a promising rocky outcrop on the left side of the valley we were invited into a herder's hut where I helped a young Tibetan lad churn butter and cheese. We tucked into steaming bowls of yak butter tea and were offered flour so we could make doughy balls with our hands. Thanks to Erin we were able to

use our laminated cue cards to explain to the locals what we were seeking and as anticipated they confirmed what we suspected that the outcrop was a 'dong' (cave). Reaching the outcrop wasn't as easy due to the abundant bunda that was as tall as myself and twice as tough. Eventually by being very sensible SW found a way through by following a marshy stream and we all followed in his wet footsteps. On reaching the cliff we followed a downward slope of boulders that lead to two holes- we had found cave!

Horse Dong named for unknown reasons was dropped by our expedition hard man SW, by an aided free climb down a 15m deep by 1m wide pitch on the left of the boulder slope. RB determined not to let SW have all the fun crawled into a neighbouring hole to find that they were connected by an undoable duck, however there was a way on. This prompted the others to scabble into their kit and shortly after RB, SW, MB, and JB started their first exploration. Meanwhile I was sat outside as I had been told that we were sharing kit between two and as I was the only person who had bothered to stick the rule I had been rendered kitless. I ate chocolate and snoozed in the rain for about forty minutes when the others returned with good news of walking passage with unusual solid walls studded with pebbles, but bad news of a sump. It was now mid afternoon and we had not found camping grounds so the others got out of their kit and we headed up the valley. We had arranged to meet the rest of the expedition in two days on the other side of the plateau so this cave would have to wait.



Outside Horse Dong (MB)



Hanging Valley camp (RB)

We stuck camp in a grassy glade between woodland sections where yaks pulled wood and the trees were shrouded in moss of a dangly mystical variety. Warmed by electric sausage and slop, we slept a peaceful first night and were awoken by yak bells and the voices of their herders the next morning.

Quite a while after first light we arose to find that the woodcutters and their yaks were long gone up the hill, knowing we had had a long day ahead we ate some noodles and packed up camp. We followed the Yak tracks west over a pass between 4000m peaks at the head of the valley; these tracks were slimy with mud and scarred with ruts from the felling and removal of trees. We often found ourselves dodging out the way of hairy yaks pulling humongous logs that were being surfed by their fearless owners. I can remember being impressed by the amount of respect the local Tibetans showed for their environment by taking only the trees needed to sell and to build their homes on the outskirts of Zhongdian. Apart from the rutted tracks the environment seemed to be unaffected by the practice. On a later trip to this area we were told by locals that

there were several deep shafts in this area, however the dense wood and eventually impassable bamboo failed to yield all its secrets.

Topping the pass took us into Long straight valley later to be named never ending valley amongst other curses. Through pillow talk RB had told me about this place, a narrow steep gorge 10 miles in length and once inside we would be encased by 1000m cliffs which is like having a Scafell each side of us. At first never ending valley was a very pleasant place as we followed yak tracks, stopping at huts to ask the Tibetans about 'dongs' and taking it easy. As we continued South West I noticed that limestone was starting to tower over us and with not enough time or rope to reach all the dark cave like spots hundreds of metres above us in the rock we collated them in the GPS. By the time we were totally enclosed by rock the track had started to deteriorate and we hadn't seen a herders hut for sometime. We occasionally found entrances close enough to the ground to free climb to, each time we took in turns to scramble up but found only alcoves we later named 'alcaves' due to the nature in which they were deceiving us.



Yaks hauling logs (SW)



Long Straight Valley (SW)

The 'alcaves' continued as the shrinking footpath proceeded and amid fallen trees and growing jungle our next discovery was to be a far more interesting (and relevant). We had passed an hour or so earlier a stream that had tumbled down the right side of the gorge at an incredibly steep angle. The boys explored to find its source however were beaten into submission by the thick bamboo. We had crossed over the stream way several times when path hunting and we had now come across it again in its empty form of a dry bed the same size and sort as the Ease Gill stream way. Within minutes we were scrambling around trying to explain the substantial water loss only to find the spot were it had just seeped away through tiny cracks. The hunt continued as the stream played this game several more times as it wined down the gorge, eluding us.

By 1600 we hadn't had a GPS signal for sometime. Because of the thick undergrowth and lack of features in this linier trap we only had a rough idea of how far we had to trek to the resurgence camp where the gorge turns into a farmed valley. After several choruses of 'are we there yet?' the interweaving spurs that had constructed the gorge appeared to get smaller. As it got dark our spirits quickly dampened and silence followed. By about 2030 the terrain and decent of 1,500m had got to all of us and even expo



Lou in LSV (MB)

hard man SW was threatening to camp on the only inhabitable space for several km's- the path! Ever the optimist I fished out a helmet a lamp and led the others on a sporting night walk, telling them that we would stop at the next flat ground not knowing that it would be an age. After clearing a boulder field/river bed we slept on empty stomachs with the unnerving roar of water nearby. The question on our minds, would this raging torrent mean cave?



*Lucky Benevolent
Water (JW)*

The next morning I woke up in paradise to discover that the raging torrent that had kept me awake with worry was the resurgence we had been looking for. The camp was flooded in sunlight broken by an assortment of trees that clung to the now less intimidating sides of the gorge. Inspired by the sound of birds and buzzy things I set off to explore down stream along the dry river bed, listening to the power of the water and not knowing what to expect. What I was greeted by only about 100m from the camp was comparable to a backdrop for an herbal essences advert. A cliff rising from where huge amounts of water bubbled out of the ground, so violently it looked as if it was boiling. As though this place was not perfect enough viney foliage then tangled down the cliff towards the water which when it had calmed down pooled against a low wall. Picking up speed the water then raged down the valley and turned white into an 8 m wide torrent to where its power was dammed for hydro electricity.

Today was to be a rest day and a chance to relax before the rest of the expedition was to join us later that afternoon. RB and I walked down the valley to meet the others travelling to the area by road by passing the dam and following a rumble track and footpaths to where it joined the Yangtze. Partway down we passed a small village of dwellings constructed of wood and surrounded by a patchwork of miniature terraced fields containing a wide variety of crops. Opposite our vista was of more grand mountains with villages perched high on their faces reached by distant snake like roads. After we reached the bottom of the now hot and dusty track we took a breather to admire the enormity of the River Yangtze in its early stages. Then passed by a 4x4 full of familiar fresh faces and kit that formed the rest of the expedition we turned around and slogged back up the track planning to jump into the ice cold resurgence on our return.

The rest of the afternoon was occupied by the boys jumping into the icy resurgence water in a display of machoism only to jump straight back out due to the cold and then in again because they were so hard. A cook area was established and due to some inspired rigging by BS our slop supplies were hung high out of the way of passing hungry pigs.

The next day I left base camp on a scouting trip with AM, BS, SW, JB and MB. Our plan was to scan the Yangtze valley at the same height as the resurgence by following a platform cut into the mountainside under which a pipeline led to a power station and village below. The track was broken and exposed by rock falls and it left us wishing for our helmets. We found several more 'alcaves' and named one Lou's Perch as it was where I had posed for photographs before we headed down to the main road by the River Yangtze. Meanwhile RB and JW we having a mini adventure of there own trying to traverse the sides of the long straight valley but disappointingly not finding much.



*Lucky Benevolent Valley
prospecting (AM)*

In the afternoon heat we took shelter in a roadside café where we drowned our disappointment of not finding cave with cold beers and I ate a bowl of egg fried rice for the equivalent of 1½ p! Thanks to AM's Mandarin skills we were able to organise a local to take us back up the hot dirt track to camp. Geologically uninspired we also took the opportunity to book him for the next day to return our kit to Zhongdian.

The ride back to camp was adventurous as the bread van leaned far too close to steep drops as it scrambled over rock falls that should have blocked our path. By the time we reached the top I had made my mind up that I would set off early on my own the next day and get picked up further down the valley to avoid my own fatality so early on in the expedition. We spent that evening around a camp fire sharing stories.

On the morning of a departure we dragged all the kit down hill for about 500m to where the track started and we were pleasantly surprised to find that the local had understood AM's mandarin and arrived at the right time. I made my way down hill on foot as RB and company relished the off road rollercoaster ride by catching it all on video! I walked and thought -we had found no cave in this place but I had found peace though its vastness and splendour. It had made me feel tiny but at the same time strong and had inspired me for the rest of the expedition. However, like all good things it had to come to an end, after all in those famous words ... its an expedition not a holiday!



Scary ride home! (JB)

Far Eastern Promise in the Hanging Valley – 21st July

Richard Bayfield

This is a story about C3-338: Hanging Valley Sink, a cave that on paper looks like an insignificant little sink with minor depth potential in an area that could sustain vertical cave development in excess of 2,000m. However, this little sink personally involved many of the team, providing hope on a very frustrating expedition plagued with bad luck and a distinct lack of quality caving.

Two days into the expedition proper, five members of our group decided to take on the unenviable task of trying to complete the “Long Straight Valley” traverse. This traverse is a direct route from Zhongdian, over the plateau and descending through a tight sinuous valley (widely tipped to have cave development) to end at the big resurgence found the previous year, C3-96/7. This traverse was first attempted in summer 2004, but was cut short due to the distinct lack of path and one of the team members being taken ill. In hindsight this traverse proved to be a stupid idea and I will certainly never be doing it again. However the traverse did have one saving grace, it provided us with going cave (although we did not know it at the time....)

The Hanging Valley, standing 200m above Napa Hai lake, is completely closed off on all sides meaning any water entering the valley could only escape underground. As the five of us (RB, LD, MB, JB, SW) finally struggled up the steep hillside to arrive at the col between the two peaks guarding the valley, it became immediately clear to us that there had to be caves in this area. Through the use of something resembling sign language and our handy phrase sheets, we tried to ask the two locals accompanying us whether any caves existed around this valley. These locals, having graciously helped one of the team with their rucksack and already bemused why westerners were climbing up into the hills rather than drinking in the old town bars, confirmed our suspicions and pointed



*The Hanging Valley
cliff face (JB)*

at a scar on the left hand side of the valley about a mile distant. As we approached this scar, now more obviously a large cliff face, it became apparent that a cave here could be quite significant. The cliff face was located at the lowest section of the valley and was fed by a very large stream that could only go underground at this point. I did however have doubts that an enterable cave would be found here; the expedition of the previous year had definitely found an inaccessible sink at about this location, logged as C3-338.

Getting to the cliff face proved a nightmare, the area was surrounded by marsh and thick vegetation (i.e. jungle) and given that dry boots were going to be preferable for a two day hike, we all minced around (with the notable exception of Steve) trying to keep our

feet dry. Eventually cave fever got the better of us and we all finally met at the point where the stream sinks underground, a disappointingly small hole, completely blocked by vegetation and, more worryingly, whole trees. Steve, not accepting this was all to be found, climbed up a steep slope beyond the sink to arrive in a hidden bowl of loose boulders and scree descending steeply to the cliff face. The temperature in this bowl was noticeably lower than the ambient temperature possibly indicating at significant cave development. Thankfully at the bottom of the bowl a number of entrances were revealed, a hole to the left descending through a boulder choke and an entrance to the right, a 12m pitch into a chamber. Steve decided that the latter was the entrance of choice and quickly rigged up a handline to be able to descend into the cave below. Without hearing any shouts of going cave, I disappeared down the left hand entrance taking care through a boulder choke to enter a series of chambers and a small stream (significantly smaller than the one sinking) heading off into the mountain. The stream issued from an impassable slot, the other side of which Steve could be found cursing. With virgin cave passage to explore, all of us with kit were soon on the



Getting kitted up for exploration (MB)

downstream side of the slot (Lou keeping guard on the surface) ready to push forward into the unknown. Following the little stream as it tumbled down over a number of small drops we found an interesting passage over three metres high and up to 2 metres wide. The walls here appeared to have a blueish hue and contained a number of small white pebbles that protruded from the rock. This passage came to a head at a 6 metre climb down to a ledge with a further drop beyond. To our disgust, two metres below this second drop lay a sump, preventing any further exploration along the main passage. Given that the cave felt distinctly drafty both myself and Steve headed back upstream looking for a possible sump bypass. Just prior to the sump I found an interesting climb into a small tube that contained a draft. Following this tube up a couple of further muddy climbs, I found that the tube then dropped into a chamber containing a perched lake. This lake, sided by sheer walls and of unknown depth, severely tested my enthusiasm to push this lead any further. With the ceiling dropping in height to within 30cm of the surface of the lake I had little intention of going swimming but was still stupid enough to attempt to traverse forward in order to see if dry passage continued beyond. This was stupid because I promptly fell in, getting soaked and leading me to believe that any further



Inside C3-338 (JB)

With virgin cave passage to explore, all of us with kit were soon on the downstream side of the slot (Lou keeping guard on the surface) ready to push forward into the unknown. Following the little stream as it tumbled down over a number of small drops we found an interesting passage over three metres high and up to 2 metres wide. The walls here appeared to have a blueish hue and contained a number of small white pebbles that protruded from the rock. This passage came to a head at a 6 metre climb down to a ledge with a further drop beyond. To our disgust, two metres below this second drop lay a sump, preventing any further exploration along the main passage. Given that the cave felt distinctly drafty both myself and Steve headed back upstream looking for a possible sump bypass. Just prior to the sump I found an interesting climb into a small tube that contained a draft. Following this tube up a couple of further muddy climbs, I found that the tube then dropped into a chamber containing a perched lake. This lake, sided by sheer walls and of unknown depth, severely tested my enthusiasm to push this lead any further. With the ceiling dropping in height to within 30cm of the surface of the lake I had little intention of going swimming but was still stupid enough to attempt to traverse forward in order to see if dry passage continued beyond. This was stupid because I promptly fell in, getting soaked and leading me to believe that any further

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MB & JB finding the sump (SW)

progress was not going to happen due to the lack of any reachable bottom to the lake. Also the passage was heading back in the general direction of the entrance, helping to explain the draft. Exiting this area I met up with Steve who reported that the remaining side passages petered out. This was very disappointing as the cave felt like it had potential but we were sure that this would be the first of many caves to be discovered on our plateau traverse.

The end... or is it?

Five days later a team headed back to the Hanging Valley to complete a thorough inspection of the area given the presence of “pink” (cave bearing) limestone on our geological maps. Some of the team decided to return to C3-338 on the off chance that they may find a continuation.....



The original exploration team (JB)

On the 28th July the whole team met up following their prospecting trips to discuss what had been found. Myself and Ben reported finding inaccessible sinks and caves that had been filled in by the locals while Alys, Ruth and Steve reported even less by way of caving potential. The others, thankfully, had a lot more

success. They had found a number of shafts needing to be dropped and a going cave that currently ended at an undescended 10m pitch. This cave, otherwise known as C3-338, no longer had a sump; it now had a dry u-tube of 6m depth with a continuation passage up to a gallery with a 10 metre pitch below.

I will be honest; this cave scared the hell out of me. This being my second expedition to the area, I knew just how quickly the weather could change from drizzle to driving rain and to the varying levels of miserableness between. To explore a cave beyond passage that sumps completely after heavy rain (i.e. normal Yunnan wet-season weather) was not what I would call a tasty prospect, but with new cave to explore I had to be part of the team that pushed it.



JB in the drained sump passage (JB)

7th August, armed with about 100m of rope, video camera, survey kit and three others who should have known better, we returned to the entrance of C3-338. Descending down through the boulders into the first chamber we found that there was now no streamway at all, hopefully meaning that there would be no sump either. James and Jon, charging off ahead, shouted back that the sump no longer existed, we had going cave! Arriving at the area where the sump should have been lay a further climb down of 6m into a slimy 1m diameter u-tube consisting of two small pots with tiny outlets for drainage. Beyond this we

started to ascend a sloping bedding to a slippery climb of 4m. This led to a sculpted ledge, known as the gallery, which had a view over a 10m pitch with further drops visible through boulders below. The draft here was very strong and the cave had become much larger in proportion indicating good things ahead. My only troubling point was that we were above a 10m pitch in a large chamber yet there was still foam on the roof of the balcony, indicating that the whole place flooded!

James was the first to descend the pitch, followed by Jon, whilst myself and



JB perched above gallery pitch (JB)

Ruth selflessly surveyed the cave. James dropped to the boulder floor and announced that there was a further climb down of about 5m between boulders. Jon, now on the rope and getting ready to descend, stopped dead as there was a roar of collapsing boulders echoing from below. Thankfully James shouted back that he was okay and unhurt. James had touched one of the precariously balanced boulders in the base of the chamber and the floor gave way just in front of him. Jon joined James at the boulder floor

chamber, coinciding with more echo's of collapsing boulders as the floor settled further.

Ruth and myself met up with James and Jon once we had completed surveying to the gallery. James and Jon had pushed on to another pitch which led to a stream and a possible duck. I had to see the new finds for myself and so remained in the cave with Jon as Ruth and James left to keep an eye on the weather. Descending the pitch I dropped on to a stack of boulders with large gaps between. Traversing very carefully between the boulders I dropped into a very large circular chamber with a soaring roof. The boulder floor, now more stable following the work of Jon and James, contained small gaps that gave glimpses of a small streamway below. Crossing through the chamber the roof dipped to a passage over boulders, eventually closing down in a choke. At this point I found Jon descending a hastily rigged pitch that was rigged from stable boulders 3m horizontally



JW posing in the large chamber beneath the balcony (JB)

away from the drop. This awkward pitch involved a tight thrutch across boulders to an overhang with the streamway 4m below. Jon pushed on down the streamway to the limit of exploration, attempting to push through the duck. The draft at this point was very strong here indicating at much passage beyond, but Jon was not convinced about going any further as the stream had become so deep that the floor could not be reached. I was looking for a possible bypass or continuation passage above but was cut short by Ruth shouting to get out of the

cave. Whilst we were pushing it had started to rain outside, causing Ruth to speed back into the cave, through the u-tube and out onto the balcony to warn us. Acknowledging the call I shouted to Jon to drop everything and get out, and we both made a swift exit out of the cave safe in the knowledge that we would only ever be back in the dry season!

Ye Kang exploration exploits: 1st August

James Bruton

We got up with the plan to go and drop the shafts we had found on the previous day and also to find and drop some which were marked from the year before, but never dropped. We took some kit for the drop, which was enough for two people and enough rope to be able to get to the bottom of the first pitch.



*MB & JB exploring
C3-369 (MB)*

There was quite a lot of hope and anticipation due to the fact that some of the shafts had the possibility of going but if not the walk would be a good acclimatisation for the altitude. We went to the first hole (C3-369) at the base of the Finger Mountain. It started off with a horizontal passage, which was different, as all the others found were vertical passages. This was descended first by Ruth who became a bit wary so Rich went in to see if he could get any further and to see how stable it was. I then followed to try and see if it would be dug to increase passage. This we found was a rift passage that had collapsed in. Rich had found a way on but it was small and needed work to make safe so we left to see what we could find in the next shaft.

This shaft (C3-307) was one that Rich had found the year before but needed dropping. This was an SRT pitch so Rich set up the pitch then I descended it. It was found to be a 6m pitch that did not go anywhere, so we packed up, marked down as done and started on to the next pitch.



*JB descending
C3-307 (MB)*



RB descending C3-203 (JB)

We then continued across the Plateau to the shaft (C3-203) that was found the day before. This was not hopeful but still had to be descended. The rigging was difficult and had many rub points. All the rub points were covered and all this left was for Rich to descend it. As suspected it was found to be a no go shaft so again was marked down on the list and progress to the final

shaft was made. This was a long and arduous trip. It meant going up and down, up and down and they were not just mounds of dirt. Rich, Lou and me left the group at the top of one peak and followed Rich to find the marked shaft (C3-215). Rich as usual sprinted off and left me and Lou trailing behind. When we met up with Rich I was amazed this shaft must go on it was vast at 10m and 4/5m wide. Rich set up the rigging and proceeded to drop the first pitch. This was done and with a landing of snow the rope did not appear to be long enough. The shaft then went down on a steep slope to the unknown. Although the passage was smaller it was highly positive. With that buzz we started back to base camp to see what everyone else had found so after a not very promising day it was looking up and left hoping a good day of caving to come.



*RB preparing to rig C3-215
(JB)*

C3-215, deepest cave or yet another crapped out shaft?: 2nd August

Richard Bayfield (extracted from the logbook)



*The large snow-filled chamber in C3-215
(JB)*

Myself, James and Jon, all full of cave fever and armed with 106m rope, bolting kit and an armful of slings, charged (crawled) up the mountains to bring glory to the expedition. Jon, unfortunately, reawakened an old martial arts injury on the first rise, leaving myself and James to bag all the glory ourselves (as well as the kit Jon was carrying!). One and a half hours later, absolutely knackered, myself and James arrived at TDCINTW. I quickly descended the first pitch and started smacking home a bolt to allow further exploration. Unfortunately I did not take much notice of my stance, tiptoeing on the edge of the iceplug and found putting in the bolt harder than the walk up!

After 30mins and many jibes from James, the bolt was in, pitch rigged and exploration could continue. The second pitch revealed a massive chamber sloping at 45°, almost 7m wide and up to 15m high. There was a significant inlet on the right (impassable) but the main cave appeared to terminate at the end of the snowfield. Continuing to the bottom of the chamber the cave ended in a huge choke of boulders which would require days (months) of digging. Myself and James surveyed out hoping the others would return with better news.

Camp Cave (Jon's YMCA): 8th August

Jon Witchett (extracted from the logbook)

It was the last day of the expedition at the Napa Hai campsite & me, James, Rich were to descend an undescended shaft that the locals had shown us. Ruth was staying to 'protect' the tents after our cameras had gone on an adventure with the local boys the night before (not necessarily stolen - we got them all back). We had a visit from the villagers in the morning who were interested in our SRT gear & helmets - one of whom had fallen off a rope in a cave before & sworn never to go caving again. We set off before midday & wanted to be back by 3pm as Simon & Katie were returning & we wanted to get down before dark. The shaft was about 4km away along a yak track that is particularly shitty. We squelched through the 'mud' (a euphemism you will tell yourself if you're not a hard-core fan of yak poo) with James charging ahead due to the distinct advantage of his terminator poles for balance while the 2 of us were slipping & sliding all over the place. I was trying to keep ourselves entertained with lateral thinking puzzles but it wasn't going down too well. The cave is only about 25m off the trail so is easy to get to & drops to what looks like a 7m drop. After singing 'in the jungle' to the theme of 'in the navy' while 'rigging' & 're-rigging' & 'modifying' & 'backing-up' & 'backing up the back-up' the pitch I went down first with a 26m pitch - after 7m you hit a crappy pulp floor & can straight away see the drop goes further. I didn't want to go down as it was a very muddy & loose floor cave so sent Rich down - also I was just wearing a tanktop after being inspired by the film 'the Descent' where fit women cave in tight tanktops. He created a rebelay to avoid rub & I went down the second pitch which led into blocked up rifts. The total pitch was around 23m so is not a bad drop but is unfortunately blocked up. I prusiked up, got James' camera, descended down to give it to Rich, & back up so he can take photos of my ass. Once up James informed us he backed up our back-up to our back-up as the tree was hanging by its roots, & then we discovered the double figure of 8 had been tied slightly wrong - but we lived to tell the tale. We headed back down with the sun shining & packed up camp giving all our food to the locals & eventually managing to show them petrol & the dangers of it. Unfortunately we couldn't easily hitch



Jon Witchett (JB)



*JW ascending C3-380
- Camp Cave (JB)*

by the causeway but breasts are definitely a big help!

8. Medical Report

Richard Bayfield

The only medical incidents worthy of comment was the presence of Minor Acute Mountain Sickness amongst members of the team. The occurrence of AMS was to be expected given the altitude of the area (up to 4,500m) and is reported in more detail below. Other than AMS, medical problems were limited to the usual expedition ailments including minor stomach complaints, blisters, cuts and bruises. None of these medical issues were considered serious enough to warrant further comment.

Acute Mountain Sickness (AMS)

Overview: AMS was the main medical condition experienced on the expedition. The majority of the team experienced minor symptoms of AMS, but these were not significant enough to cause concern or warrant medical attention. The presence of AMS undoubtedly affected the overall performance of the expedition, through reduced physical capacity and morale.

Acclimatisation: Acclimatisation was undertaken by the team in order to reduce the symptoms of AMS. Altitude was gained over a period of days, starting at Kunming (alt. 2,000m) followed by a couple of nights at Zhongdian (3,200m). Prospecting trips were organised to increase altitude over a period of days, culminating at camping on the 4,000m mark. This gradual increase in altitude was very successful in reducing cases of AMS, with symptoms reported being far milder than those reported on previous expeditions to the area.

Symptoms experienced: The following symptoms were observed frequently and were attributed to mild altitude sickness:

- Headache
- Fatigue
- Loss of appetite
- Dizziness
- Difficulty sleeping
- Feeling of “drunkenness” and light-headedness

For a comprehensive report regarding medical considerations (including locally available health care, available medical equipment and risk of disease) please refer to the Medical Report contained in the Yunnan 2004 publication [HMG04] written by Simon Flower MB ChB.

9. Accounts

Richard Bayfield, Maxine Bateman

The expedition expenditure in the accounts below is split into three categories: Expedition Expenditure, Kitty Expenditure and Personal Expenditure. Expedition Expenditure covers all expenditure that was deemed to be the responsibility of the expedition as a whole, and that was independent of the number of man days in the field. Kitty Expenditure covers all costs incurred in the field that were shared between expedition members. Personal Expenditure covers costs incurred by individuals as part of the expedition but regarded as a matter for individual responsibility. Personal expenditure was not processed through expedition accounts but is included here to give a realistic estimate of the total cost of the expedition.

Income

The expedition was well supported by external grants. All other income took the form of contributions from expedition members.

Grant Income	
China Caving Project	750.00
Mount Everest Foundation	<u>375.00</u>
Subtotal	1,125.00
Personal Contributions	14,000.00
Additional team contribution	<u>175.00</u>
TOTAL	15,300.00

Expenditure

Expedition expenditure

Gear	
150 Petzl 12mm Self Drilling Spits	119.00
4 12v 1.3Ah Lead Acid Batteries &	
2 12v 3Ah Lead Acid Batteries	22.00
2 12v Lead Acid Battery chargers	21.43
2 Battery chargers	40.00
2 Rolls of Gaffa Tape	7.96
Crowbar and fuel bottle	1.64
Miscellaneous	<u>13.00</u>
Subtotal	225.03
Photography (est.)	75.00
Publications (est.)	<u>100.00</u>
TOTAL	400.03

Kitty Expenditure

Food, drinks, etc	308.79
Accommodation	205.71
Local transport	113.43
Equipment shipping	64.28
Guiding/porters/gifts	78.57
Miscellaneous	<u>27.79</u>
TOTAL	798.57

Personal Expenditure

Travel	
Flights (est.)	9,050.00
Buses etc. in the UK (est.)	400.00
Inter-town transport in China (est.)	<u>450.00</u>
Subtotal	10,000.00
Hong Meigui Membership	650.00
Personal gear (est.)	2,000.00
Insurance (est.)	1,055.00
Visas	<u>390.00</u>
TOTAL	14,095.00

Summary of Expenditure

Expedition Expenditure	400.03
Kitty Expenditure	798.57
Personal Expenditure	<u>14,095.00</u>
TOTAL	15,293.60

Balance

Total Income	15,300.00
Total Expenditure	<u>15,293.60</u>
Surplus ¹	6.40

¹Any surplus that remains once the final expenses are in will be passed to the Hong Meigui CES.

10. References

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Jon challenging the locals to an arm wrestling contest (Photo: ML)



Lou cooking up a storm (Photo: RB)



Simon celebrating his birthday in style (Photo: LD)



Loading the horses for the trip down to Zhongdian (Photo: MB)



James assisting with kit transport across Napa Hai plain (Photo: RB)

11. Thanks

In a time where funds are increasingly hard to come by we would like to thank all our sponsors for their far-sightedness in helping to make our expedition possible. Special thanks go to Mount Everest Foundation, Ghar Parau Foundation, Andy Eavis and The China Caves Project for their generous contributions towards the expedition. Also a big thanks to Macpac, Needlesports and Epik for their kind donation of equipment.

Also a special thanks to all those that assisted with the background work in organising the expedition with a special mention for Erin Lynch and Hilary Greaves who gave vital support and experience towards planning.

I would like to extend our thanks to all the local villagers of the Zhongdian plateau who showed us cave entrances and invited us into their homes and I would like to thank Daisy, the previous owner of Milk River Guest House, for her hospitality and help throughout the expedition.

A final note of thanks is to Liu Hong, without whom this expedition would never have been possible.