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EDITORIAL

The following report of the 2003 British expedition to Vietnam has been compiled from extracts and articles written by expedition members. Following the success of the expedition it was decided to limit articles and surveys to discoveries over one kilometre or of particular significance.

Martin Holroyd



Vietnam 2003

The compilers of this report and members of the expedition agree that any or all of this report may be copied for the purpose of private research.



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INTRODUCTION

The 2003 expedition like many before was a great success. This was our 8th visit to Vietnam and still we had new unexpected things happen to us all the time. We had a record success with finding a little over 45km of passage. This in itself is quite an achievement given the actual number of caving days we had not including travelling etc. With many of us having lots of practice of surveying Vietnamese river caves, teams would go out find a cave, survey it and photograph it in a single day. This happened on many occasions and a couple of caves over 3km were explored in a single day including long walk ins. This was achieved mainly with the help of our Vietnamese colleagues at Hanoi University. We also had with us excellent drivers also arranged via contacts at the University. These drivers played a large part in the success of the expedition. Our friends at Hanoi University were outstanding as usual but I must pay special attention to Prof Nguyen Quang My, a wonderful person who without his immense assistance and kindness we would never have had the opportunity to visit this wonderful country.

Again like many times before the local people all were extremely friendly towards our desire to explore the caves. This is also a large factor for the expedition finding so many new caves. We did have problems, often military permission was not possible and this did cause a few worries to our Vietnamese colleagues especially when one team had problems within 1km of the Chinese border twice in two days. It was not easy obtaining all the permits, however our friends at Hanoi managed to assist us whenever possible and we managed to have only two days out of seven weeks when we could not cave or travel to the caves. We managed to travel through many provinces this time in Vietnam. The first province we visited was Quang Binh, 500km South of Hanoi and our southernmost point. From there we moved North through Nghe An, Thanh Hoa, Hoa Binh and onto Lang Son and Cao Bang. Most of our success was in the Northern provinces near the Chinese border.

I hope this report is able to put over the wonderful time we had on the expedition whether exploring new caves or just being lucky enough to experience the friendship always shown by the Vietnamese people.

The expedition would not have been possible without the generous grants towards the expedition and to this I am most grateful.

Howard Limbert



QUANG BINH PROVINCE

The Ke Bang Massif in central Vietnam stretches into neighbouring Laos and has been the main caving region for the British expeditions since 1990. The team has been based at the village of Son Trach, which in 1990 was a poor village with only very basic facilities. However with the development of Phong Nha show cave it has developed into a prosperous centre for tourism. Cave exploration has taken place in often-remote areas of jungle with many magnificent river caves being discovered forming two distinct systems. The vast resurgence cave of Hang Vom, perhaps one of the finest river caves in the world with its sinks lying deep in the jungle at Ruc carroon. The Phong Nha system resurges at the impressive show cave and is fed from Hang Khe Ry, Vietnams longest

The 2003 expedition hoped to explore deeper into the jungle from Ruc Caroon and push further upstream the Hang Vom system. It also investigated areas between the sinks and resurgences of both systems.

HANG ABOUT

We stumbled through the dark forest on our way to Hang Dai Cao. The idea was to camp at Hang Dai Cao and then to cave through three further caves in order to reach the upstream Hang Ho entrance, where on a previous expedition, in 1997, two lads had followed a dry riverbed to a new entrance while the rest of the team finished the survey. There had been no time to explore the new entrance then, and so we were returning now to complete the work they had started.

Hang Dai Cao, our camp-site-to-be, is a link in the >30 km chain of caves that form the Hang Vom hydrological system, originally found in 1992. Hang Vom, the cave that lends its name to the system, is a 15 km long cave of truly enormous proportions. Its sink, Ruc Caroong lies near the border with Laos, far away from civilisation, about 44km up the Ho Chi Minh trail from the nearest sizeable village (Son Trach), our base.

The water of the Ruc Caroong sink disappears in a downstream sump after only 2.8 km of passage. The main water then re-emerges 10 km further downstream in an inlet of Hang Vom itself, and finally resurges into the Chay river having crossed Hang Vom for a further 15 km.



Apart from this massive 10 km question mark, downstream Ruc Caroong also continues in two semi-circular dot-to-dot-caving series of flood overflow caves, some completely fossil, others semi-active, separated by stretches of jungle. These two hydrological prongs unite at Hang Ho (Tiger cave, named for the tiger footprints found at the sandy beach at its upstream limit), hence making Hang Ho a keystone in the flood overflow part of the system. Downstream of Hang Ho, the two flood overflow branches unite and are channeled towards Hang Vom, via Hang Pitch, the complex Hang Duat, and finally Hang Dai Cao. All of the caves below Hang Ho are wet and have impressive proportions.

One of the two flood overflow branches passes through two caves (Hang Pygmy and Hang Over) and is completely explored. The other branch still carries a question mark of maximally 2 km between Ruc Caroong and Hang Ho. In all probability, the entrance seen by the two lads in 1997 would provide this missing link. More tantalisingly, this final piece in the overflow puzzle might also provide a way into the completely unknown missing10 km branch that takes the main water from Ruc Caroong to Hang Vom.

Our aim was to camp in Hang Dai Cao and to then cave through Hang Duat and Hang Pitch to Hang Ho, where we would swim to the upstream end, exit across the sandy beach through a dry river bed to find the connection with Ruc Caroong and perhaps a way into the unexplored 10 km. Worth a go, and even the more so for me, as it involved camping in the jungle in the vast Khe Bang Massif, a great treat for me.

So we were stumbling down a small dry river bed in the dark and our guide appeared to be lost. It was raining and the sharp limestone boulders in the riverbed were slippery and the leeches were coming out in force. Howard kept insisting we had gone wrong, that we should have climbed two steep hills by now. He was worried with good reason, as he had got lost in the jungle for two days off the self-same track, in 1999. Déjà vu? This should be a 3 hour walk and we were coming up to about 3 hours, with Hang Dai Cao nowhere in sight and the terrain unfamiliar. Our guide was arguing about the direction to Hang Dai Cao with every team of woodcutters we encountered. The fact that they invariably shouted Hang Dai Cao in a surprised tone and then wildly pointed back to where we had just come from did little to reassure us. Nevertheless I took heart, as our guide confidently insisted that he knew the way, ignoring the woodcutter's gesticulations.

After another quarter of an hour in the dark (well, with LED torches), I could hear frogs ahead and shouted to the rest of the team that we must be nearing water. The path suddenly dipped very steeply down a sandy bank among tall grasses. I was first to stumble to the bottom, watching the guide turn round triumphantly to show me what he thought was Hang Dai Cao entrance. Except I had camped there in 1999, and this didn't look anything like it...

We were clearly in a dry stream bed. About 6 m wide, the ground at the upstream end was punctuated with fetid green pools and boulders on a basically sandy floor. Raising my eyes, everything was shrouded in vegetation, tall trees interpsersed with bushy jungle. The downstream end terminated in a large arched cave entrance above a sandy beach and further downstream a deep looking sump pool. Several, no doubt tiny, frogs had chosen the pool as their home and resonance chamber, producing stentorian echoing calls audible a considerable distance away.

Howard and the others soon arrived and agreed this was definitely not Hang Dai Cao. While we sorted out the camp and got food and water on, Martin, Duncan and Sweeny got kitted up in wet suits to swim into the cave and see if Martin would recognise it. Martin had caved in the area several times before, Duncan and Sweeny had never been to the area, but were desperate to get underground and to lend moral support. We stood on the sandy beach, listening to the frogs calling and watched the three lights slowly disappear in the dark. Our slightly miffed guide still insisted this was Hang Dai Cao, despite Howard's attempts at explanation. About an hour later Martin was able to report that we were

encamped at the upstream entrance of Hang Ho. Delighted with the good news, we thanked our bemused guide. By insisting on taking us to the entrance he knew as Hang Dai Cao, he had saved us several hours of caving through Hang Duat, Hang Pitch and Hang Ho, and had taken us precisely to the one spot from where the remaining lead could be accessed by a mere 20 minute stroll up a river bed.



Next morning, we split into two teams. Howard, Martin, Sweeny and Snablet caved back through Hang Ho into Pitch Cave to follow a lead there. Duncan, John, Dan and I went up the river bed to hopefully find a way into the Hang Vom system.

The walk up the river bed was more of a scramble, as it had rained overnight and the large, algae covered boulders were treacherous and slippery. In between climbing boulders we waded through fetid, green, swampy puddles, left over from the last floods and now reduced to slime and sediment towards the end of this dry season. After about 30 mins, the riverbed just stopped at a high limestone cliff. To the left of the cliff we saw a gravelly ramp that looked very much as if it might carry a stream in the wet season. To the right, behind several bus-sized boulders, we could just glimpse a tantalising black hole. We had found the entrance.

Dan and John climbed into the entrance to check out whether the cave was a going concern. I got the GPS out to get a fix on the entrance, and Duncan had a look for our beautiful interpreter, Miss Hoan. Even though she was very much under equipped for the cave, having just a pair of canvas trainers for footwear and no wetsuit to speak of, and even though she had not really enjoyed our nocturnal walk to the cave, she had insisted on joining us (accompanied by the guide), but had been left behind after the first few metres. We thought it wise to have a last attempt at dissuading her from coming along. By

now Dan and John were hooting loudly with delight as they established that there was passage to survey. I could no longer wait for the GPS satellites to appear and climbed over the boulders to join them. And then the three of us waited for Duncan. And waited. And outside, behind the huge boulders, Duncan waited for Miss Hoan. And waited. And then Duncan went back to the camp to make sure Hoan hadn't drowned in one of the puddles, or broken her legs on the slippery boulders. After what seemed like hours, Duncan finally re-appeared, having found Hoan safely snuggled up in her hammock, reading her Vietnamese-English dictionary. We were finally done hanging about and ready to reel out survey tape.



The passage started off with boulders and sand in the entrance, then lead into an imperceptibly slowly flowing stream. To begin with, we walked and waded. The cave was very bare in character, like other active parts of the caves I had seen in this area. The walls were completely smooth and grey, not a decoration in sight; obviously it would be blasted in the wet season. Soon the stream became deeper, and before long we had to survey while treading water - at least that made the clinometer readings easy. After two hundred meters of bleak, clean washed, dripping passage, we reached a second entrance with a steep green ramp. Beyond this, the river continued at swimming depth. Looking behind her towards the alternative entrance, Dan noticed the water had an eerie, greenish phosphorescent glow. On closer inspection, this turned out to be due to a hanging wall, just low enough in the water to appear solid when nearby, but letting the sunlight filter through underneath. One of the few pretty features of this no-nonsense cave. Further along, we reached a boulder collapse. Climbing down the other side, we found a third entrance. This was preceded by an ornamental elliptic eyehole into the green rainforest outside our cave. John named this the 'Jade Splinter'.

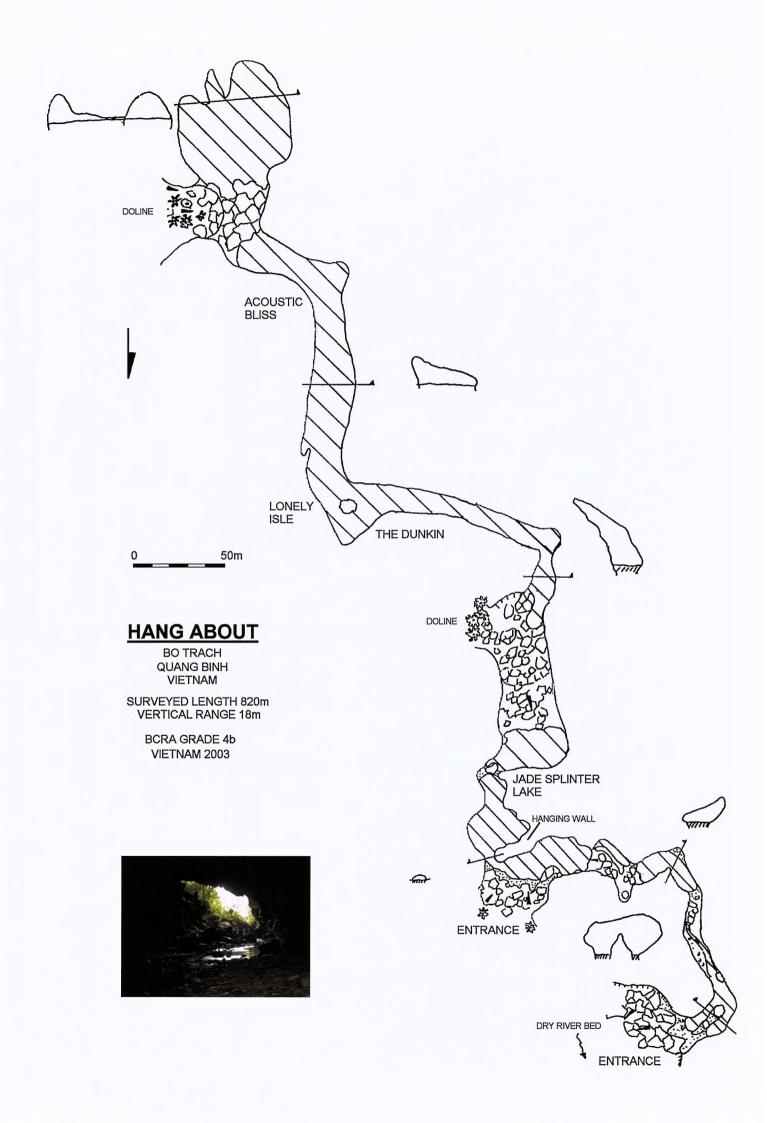
Here, the river stopped, allowing us to briefly leave the cold, deep water to find the way on at the other side. Back into the water to swim into the black distance. As the passage dimensions increased, we stuck to the left hand wall. After the second survey station, we entered a large, very misty chamber with a magnificent echo that I timed at 14 seconds. This made understanding the survey readings quite difficult, especially as we were reeling out 50 metre lengths. We reached a small rock island. Blackness all around, and even our best spot searchlights could not see an end to the swim. Was this a lake, a terminal sump or just very large passage?

We fettled our lights and had a snack to decide on how to progress. We had been going for a few hours, but had only surveyed about 650m so far, what with all the waiting for Hoan. Duncan was feeling very cold and got his survival bag out. He was in a semi-furry suit, not at all appropriate for a full on swimming cave. John had been feeling unwell and was keen to call it a day. Dan was happy to go on, but was without a life jacket. Although a very confident swimmer, she understandably did not fancy a long swim on her own without buoyancy aid. And so all eyes turned to me, in my full wetsuit and bright yellow life jacket.

I lowered myself into the water and swam towards what we thought was most likely the passage continuation. I started off with a survey tape and reeled out 36m to the nearest wall. I then let go of the tape and carried on swimming, always along the left hand wall. The passage was actually much less wide than we had believed, and I could see the other wall quite easily, about 20m away. As I progressed, I turned round every once in a while to see the three lights on Duncan's island grow dimmer and dimmer. Every movement I made created waves that filled large scallops and air pockets in the walls near the surface of the stream, producing unnervingly loud booms with full 14 second echoes.

Was this lake not likely the perfect habitat for large, predatory catfish - and just how big would these catfish get? Best to keep swimming vigorously, to discourage any wildlife from being too inquisitive and to stave off the cold.

After what seemed like several hundred meters, I began to feel a draught. The draught steadily increased, and I saw the roof lowered right down in the distance. The air whistled around my head,



causing my carbide light to hiss alarmingly. I sure hoped it would not blow out, as I was not at all confident that my LED backup would still work in these conditions. As soon as I popped out behind the low arch, the draught stopped as if someone had turned it off. A few more meters round a rocky protrusion and - I had found the fourth entrance. With this reported to the marooned on Duncan's Island, they agreed to survey to this last entrance and to return the next day. We had about 800m in the bag.

The next day, the entire team came to Hang About. We were meant to leapfrog survey, and there was also a photography team - all expecting to find a way into the giant Hang Vom system. In the end, our team was caught up by the keen second team in the last entrance: where we were still busy trying to find the way on. Ironically, given that there were now eight of us rearing to go, there was no way on. Not only were we not going to break into the Hang Vom system, we hadn't even managed to realise the cave's full 2 km potential. Just to make sure there was not a way on at the other end of the last entrance doline, Martin, Dan and Sweeny thrashed through the leech-infested jungle, but found nothing.



We took a few photos of the rather unassuming passage and then we went out the second, rather than the original entrance to connect this with the gravelly slope at the end of the riverbed and get a GPS fix. Back to camp for a last day in the rainforest, to prepare for the return to Son Trach's committee politics.

Anette Becher

HANG DONG/PITCH CAVE

In 1994 Pitch cave was explored, which formed part of the upstream Hang Vom system. At the

time many of the team expressed how remote they felt deep into the jungle and beyond a number of caves. Mixed reports of a large entrance above the then exit of pitch cave that had been entered but not fully explored fuelled a further look in 1997. However the lure of pushing further upstream of the Hang Vom system meant only a brief look was made and as the 1997 team also used a second exit to by pass the pitch meant that the 'large entrance' was never found. Again in 2003 we were curious to find the entrance and further interrogation of the original explorers convinced us that we should at least attempt to penetrate the inhospitable terrain clad in wetsuits to try and find the elusive entrance.

Our fortune at finding the Hang Ho camp meant that we enjoyed a pleasant trip through the stunning Hang Ho as opposed to three caves including the complex Maze Cave. The downside was that we had to fight our way through a combination of dense jungle on a steeply sided valley and scramble over huge boulders littering the riverbed. Approaching the area where the original explorers must have 'popped' up into the jungle we could see a dark shadow in the cliff, by climbing up over house size boulders and a leap of faith we found ourselves staring into an enormous entrance chamber. They had, after all been right. Eagerly we set off into the cave night surveying as we went. Our excitement soon dwindled as the passage climbed a steep calcite slope but trended in the direction of Pitch cave. After only a short distance barely out of sight of daylight we hit a large junction. Our worst fears were confirmed when Howard and Martin recognised this as Pitch Cave. The original explorers must have only been a survey leg short of connecting the two. At least a nine year mystery had been solved.

Martin Holroyd

NOUC NIT

At the start of the expedition, one of the major remaining "gaps" in the Phong Nha catchment area was the course of the water from the Hang En / Khe Rhy sink to the upstream end of Hang Thung. The latter was explored in 1994 and left at an upstream sump, whilst attempts in 2001 to bypass the boulder choke at the sink had resulted in lots of walking and jungle-bashing and not much cave.

Our aim in 2003 was to head for the area between the two known points and, in particular, to a cave called Nuoc Nit which had featured in dispatches from the last expedition. The name had been translated, as among other things, "Meeting of the Waters", which sounded ideal for our purposes. The only problem was that knowing the area around Hang Thung and Hang En, we anticipated an arduous, leech-infested thrash to the entrance and prepared ourselves for the full jungle experience.

Our transport to the roadhead was the usual heavy duty construction lorry. This one was perhaps a little smaller than we felt was ideal, but since our part of the group was to be deposited around 1 hour up the road it promised to be bearable.

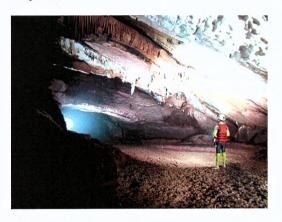
Three hours later, we are sat by the truck 20-odd kilometres up the Ho Chi Minh road, way past our drop off point, with a broken fan belt and no spare....by now we have become accustomed to such distractions in Vietnam! One of the new recruits even used the time constructively to get to know the porters better – by the time we set off again, he could barely stand, having consumed several bowls of a strange opaque liquid from a yellow plastic oil container (No names, but he's a scientist from Oxford with the initials CJD!).

After dropping the Hang Dai Cao team at the head of the road, we returned almost back to Son Trach and then headed off up the newly constructed road towards the Hang En end of the massif. It was now clear we would not be getting as close as we thought to our objective today! As dusk fell, we arrived at the army camp at the roadhead. "It will be fine" said Mr. Thach and only half in jest added "either they will let us stay or they will arrest us!".

Fortunately, they let us stay and we prepared our dehydrated jungle rations in the camp kitchen.

These, along with several litres of water, seemed to undo most of the damage the rice wine had done to Chris and we retired to our beds (wooden, army, covered) to ready ourselves for the rigours to come in the morning.

The rigours consisted of about a kilometre walk back down the road, followed by a quick bash through the jungle to a wide, dry streambed. Following this for a couple of kilometres, we gradually approached what looked to be a more caverniferous lump of limestone. The stream dropped down over a series of boulders and suddenly we had arrived. The entrance to Nuoc Nit, a 15m wide by 30m high gash in the base of the limestone with a stream gently gurgling off into the darkness. The latest version of the translation of the name was "Water Go In" – we figured we had better go in as well and the frustrations of the previous day quickly began to evaporate.



Whilst the porters set their fishing nets in the entrance pools, we began the survey. Martin, Woody and Paul measuring and noting, Chris scouting and Deb on international relations duty with the Vietnamese who accompanied us into the initial part of the cave. A short crawl just inside the entrance quickly gave access to a pleasant section of streamway with pools and gours which led up rightwards to another entrance in the cliff. We were far more interested in the downstream end and Woody was quickly impressed by the chamber into which we emerged following the gour dam section. The chamber continued for some way; in fact the chamber was a passage of the more traditional dimensions, i.e. at least 50m wide and 30m high. The expedition was now truly "Up and Running". Deb volunteered to return to the army camp with the porters to bring down the rest of our camp gear (we had initially travelled light to check that there was something to carry our heavy loads for).



The main passage continued in fine style – a vast boulder and cobble floor interspersed with sandbanks and decorated with huge stal formations. The stream trickled insignificantly along under the classic arched roof of the Vietnamese river cave. After approximately 800m, a boulder collapse area made for more awkward going. At this point we noted a substantial stream inlet emerging from the left wall, but obviously followed the wide-open downstream route. With a more active flow, we now believed we were onto a winner and wondered if we would meet Hang Thung upstream or downstream of the sump. As always happens, such thoughts proved to be counterproductive as the roof began to lower and the water drained away at the foot of a wall of rock which appeared across the passage. Overflows to left and right both ended in sumps and bold attempts by Chris to enter a possible roof tube by combined tactics failed. 1.2km in and we were facing disappointment.

Returning to the inlet area, a climb up the boulder collapse led into a high level branch which was followed towards the sound of the river. A sandy slope led down to the edge of a lake with the sound of rushing water beyond. Chris swam over in his underpants (good lad!) and returned with stories of a swim to the base of a cascade. Having no wetsuits at that stage, we tactically withdrew to the entrance just in time to meet Deb and the porters with the rest of the kit.

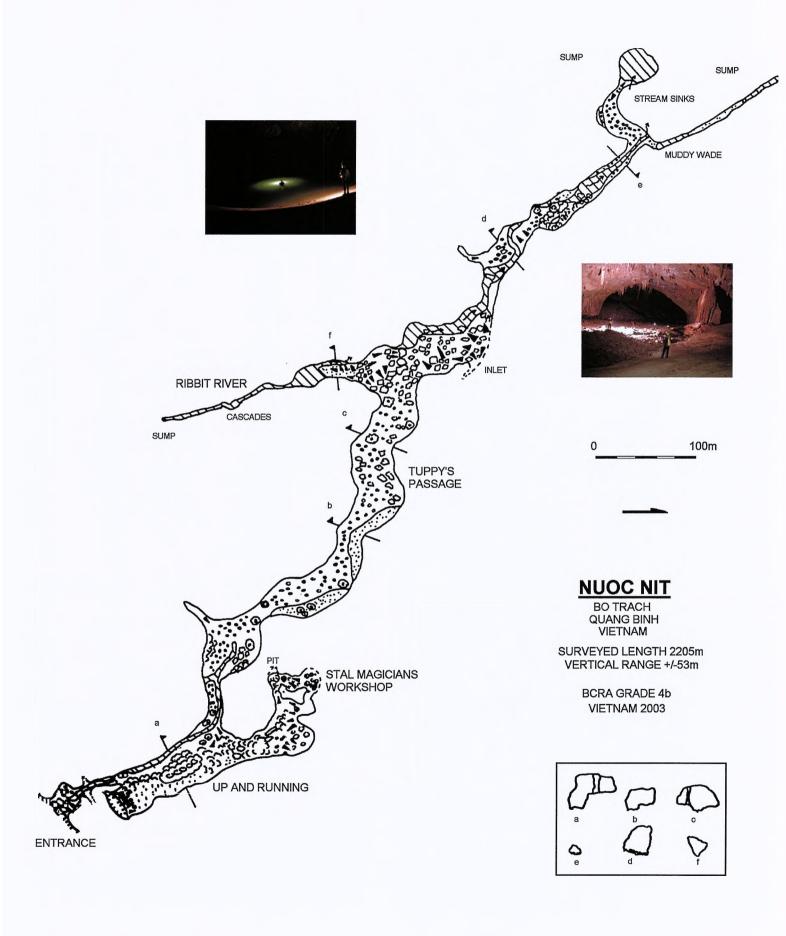
An evening trip added a further 600m of survey including the high level series around the entrance. As well as taking photos of the beautifully decorated gours and chambers of the "Stal Magicians' Workshop", we also committed the main passage to celluloid. Over the evening camp fire and (for some) a wee dram or two, we mused on the origin of the inlet. Could this be from Hang En? We doubted the flow was

anything comparable to the Hang Thung river, but it was very dry in Quang Binh...

The following day, armed with wetsuits, we returned to the inlet and began the survey. The lake led to a canvon, which could be traversed in part, but often necessitated swimming. It was named "Ribbit River" in honour of the noisy frogs that had bellowed throughout the night and thwarted our attempts to sleep (but several of which were quite tasty!). The cascade was climbed without too much trouble and we quickly rejoined the river in a deep canal. A few legs along this, we were confronted by a blank wall. The water welled up from a deep sump and no airspace could be detected. This was disappointing given our hopes for a link back into the main drainage system, but nevertheless it was an excellent cave in the true Vietnamese style.

Upon plotting the location and the survey of the cave on our maps back at base camp, it became apparent that the Nuoc Nit river is an independent water course, undoubtedly joining the Phong Nha system, but unlikely to be directly associated with known caves. In this respect, our attempts to fill the gap have only raised more questions. The origin of the Nuoc Nit inlet is still not known and the great imponderable of the fate of the Hang En / Khe Rhy river before it meets Hang Thung remains a mystery.

Paul Ibberson

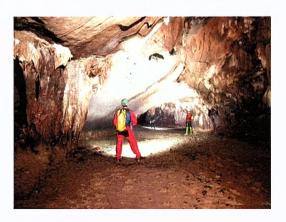


HANG SO DOI

Car-boot Cave Hunting - Hang So Doi (Bowl Cave)

Finding caves in Vietnam requires spending hours scrutinising maps followed by days sweating through the jungle. Alternatively, you can ignore the maps and wait until the Vietnamese have built some roads. Then wander along the side of the road and when the air feels cold walk into the nearest cave entrance.

We avoided the 8 km walk down from Nuoc Nit by flagging down a large empty truck that appeared as we reached the roadside. After setting up a squat in a roadside tin hut whose owners were absent and working on the roads elsewhere, we set off along a line of culverts under the road. A small sumped resurgence lay behind the second culvert, and behind the next culvert 50 m along from that was a small entrance named by the road builders as Hang So Dua (Chopstick Cave). Entering this we found 500 m of passage, with muddy rifts and crawls opening out into a pleasant enough streamway which sumped upstream and which we mud-traced downstream a few hours later to the resurgence sump. Culvert 4 had no stream, no draught and no cave. Directly behind Culvert 5, a full 400 m walk from our adopted shack (whose owners had since returned and fortunately invited us to stay), was the walk-in entrance to Hang So Doi (Bowl Cave). This provided a source of natural airconditioning for the construction workers who were living in the culvert.



Full team including guide and translator enter to push, survey and photograph. Very pleasant start compared to Chopstick Cave, dry gravel/cobble floor. After low bit, cave opens out to pleasant walking passage with plenty of gour and stal decoration. Deb, Martin and Paul surveying, Chris and Woody scouting, Mr Thach and Mr Du jollying along. After wet-looking side passage, (the main passage) eventually closes to a wet, muddy crawl. Chris braves the cold and squalor in his pants and returns to announce it is still going. Muted enthusiasm. Deb and Chris survey on, whilst the rest begin to capture the splendors on celluloid.

Some amusing asides: "Mr Thach, please don't hit that stal with your hammer while you are the photo model".

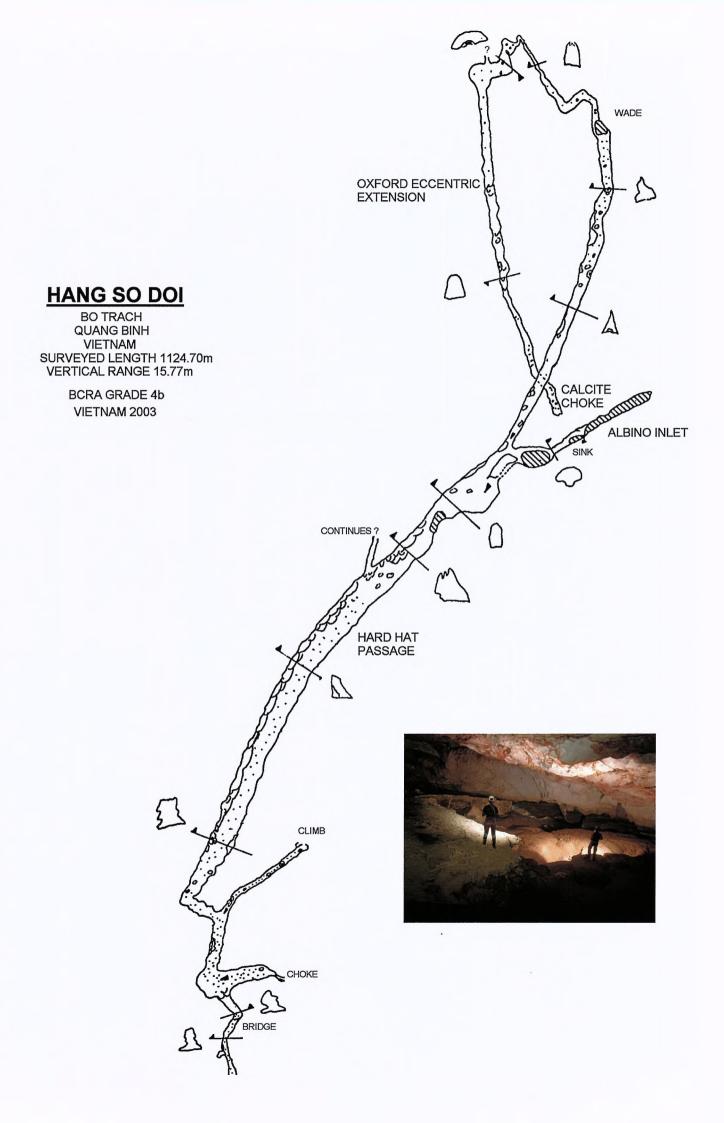
"Mr Du, I know you are hard, but would you please wear a helmet if you're in the photo?"

But all progresses smoothly. Near the entrance, half a film later, we bin the photography and head back to the sharp end. A quick carbide fettle in the wet side passage is interrupted by Deb and Chris returning with the cave having closed down. We survey the wet bit to an inlet sump and pick off the other side passages.

'1185 m, mostly pleasant. Not quite the full jungle experience, but then again, you can't beat a bit of "car-boot caving".

Back at the shack our 'jungle' porters told us that while catching fish in a small river on the opposite side of the road, they had discovered a low resurgence cave. We crawled through the ducks only to find rats at the far end 200 m later. The next day, continuing along the road, Mr Du led us up the hillside above Culvert 6 to an enormous fossil remnant of possible past military significance (i.e. a bomb shelter). This turned out to be a through-cave, with the passage only slightly longer than it was high, but spectacular nonetheless. We returned to find Howard, Sweeny, a crate of beer, and a truck, ready for the journey back to Son Trach.

Chris Densham



HOA BINH PROVINCE

A new area to visit which, from the maps we had, looked very exciting. a linear block of limestone over 80km long and 20km wide with many sinks marked on the plateau which lay above 800m. Unfortunately the limestone was thinly bedded and very little cave development found. Of those that were found the rock was generally poor and brittle and nearly led to a serious accident for one team member when a ledge collapsed under him. A smaller block of limestone to the north east of the main block did yield a significant cave, over 3km long in a 2km² block.

HANG GIO / WIND CAVE

We had been caving in the small sections of limestone in Hoa Binh province for some days now but at last in Yen Thuy district we were promised caves in the main massif. We duly arrived to see the president who quickly set off as guide on his motorbike. However something was lost in the translation and we drove away from the massif. We finally stopped and refused to go in the large beautiful cave he promised in a small block of limestone. He was desperate for a show cave!!

We decided to go for it ourselves and returned to the massif in search of the elusive cave. We came across a scout camp in a grassy clearing near the limestone hills. Here we were greeted by hundreds of young boys and girls all of whom knew a cave in the main limestone block. They wanted us to stay and sing songs or whatever scouts do in Vietnam but we managed to escape armed with 2 lads who would act as guides. Again they led us away from the main massif!!!! We were getting a bit frustrated by now, but just then the president appeared from nowhere and pointed to the main massif again.

After much stopping to ask the way to this mysterious cave we finally stopped by a large lake. Two bamboo rafts appeared and we were put onto these decidedly dodgy vessels. Armed with our life jackets we set off having no real idea what was happening or where we were going. My boat promptly turned turtle and GPS's and various items of caving gear floated/sank in the deep lake. This was great fun for everyone concerned but me. However I managed to save most things and the titanic set off again with the

raft underwater by 1ft making it look like JC crossing the lake. What with the previous day's aquatic episode, with our jeep going underwater in a river crossing this expedition was having its fair share of water problems.



At the other side of the lake the team of 3 finally got together to visit wind cave. We clambered from the lakeshore to a 5m x 3m entrance with a slight draught. Our boatman quickly became our cave guide and stripped down to his underwear for the trip. We surveyed in a reasonable dry series, not bad, but not quite the Vietnamese standards we were accustomed to. The limestone looked poor quality, thinly bedded and interspersed with shale. We then came across a pool, which looked to be the end, and we were about to pack it in when our guide jumped in and did a short duck. Because he had no light we were forced to follow this crazy person. The continuation became worse. A tight squeeze unheard of in Vietnam and in a dodgy boulder slope was passed and we all wondered what we were doing here. However in front we could hear the sound of a large amount of water so we cursed our way forward only in shorts and Tshirts.

We entered a large stream passage and with thoughts of kilometres of river passage we entered a big breakdown chamber. Upstream, the way we wanted to go was a complete choke, which dashed our hopes quickly, however downstream continued in a streamway in a 3m x 3m passage. The floor of the streamway was deadly and incredibly slippery, however our guide was having no trouble in his minimalist caving equipment-no light and no shoes. We reached a sump downstream but a larger passage intersected near this point so off we surveyed. Then Paul doing a 3m climb up took a nasty fall luckily landing on the only flat rock in town. His foothold which looked as good/bad as

anything in the cave collapsed. We decided enough was enough and slowly and carefully exited the cave having surveyed 530m. The boat return went without another disaster and the president was on shore patiently waiting for our report on his future show cave. Again we had to disappoint him.

Howard Limbert

HANG NUOC

Hang Nguom Nuoc 1

As with all good tardises, we would never have imagined the amount of cave this limestone outcrop would yield when we first arrived at what Paul termed "that tiny limestone noggin", and what the Minister for Culture and Education had assured us was the best caving area in Yen Thuy District. The setting was rather idyllic – a diminutive, isolated limestone outcrop, edged with semi-circular bays and situated away from road and village. The immediately adjacent army firing range seemed but a minor blip, all else considered. One of the bays fringed a single bedroom house on stilts with several adjacent modest vegetable plots and a few scattered chickens scratching for grains and insects.



A shallow streamlet, perhaps a yard or two across, issued from a small opening in the rock nearby, flowing in a lazy curve around the crops and off to the north. Above, in the hillside behind the stream, we could see a black, circular hole. Further along the edge of the outcrop, and partly obscured by vegetation, the presence of swamp grass by a solitary blue puddle indicated a stagnant resurgence.

Three entrances to examine! The minister's face beamed with an unspoken "I told you it was

superb". Never mind that these specimens were lilliputian compared with what we had come to expect from Vietnamese cave entrances - we did not have the heart to disappoint the eager minister. Contriving to look suitably impressed, we split into a dry and a wet entrance team and set off.

The wet team consisted of Martin Holroyd, Gareth 'Sweeny' Sewell, Anthony 'Woody' Wood, and myself. Although the entrance had looked minuscule from the homestead, once standing in the stream we could walk in without having to bend over. Inside, the passage enlarged substantially and we waded along in comfortable space, grudgingly admitting that this was not that bad at all.

The going was very easy, if mildly irritating due to occasional vicious boulders, lurking under water to attack the shins of the unsuspecting caver. After about 600m we reached a second entrance. Intriguingly, this entrance had witnessed substantial man-made modification. A concrete and stone pier allowed for easy landing of cargo. A naked wire running along the cave roof ended in a solitary light bulb that dangled precariously above the man-made pier. Hidden behind a natural rock pillar, a sizeable still explained the nature of the nocturnal activities the modifications were designed to facilitate. The entrance opened up into an enclosed doline with parallel high level entrances to the right and left of the distillery entrance. Inside, a nearly water filled passage with a semi-circular diameter led into the black distance. Woody decided to have a quick look along this passage and disappeared. The rest of the team continued surveying along the main stream, leaving exploration of the side passage and doline for the return journey. Little did we know.

The continuation of the stream distillery entrance is reasonably decorative and might, at a pinch, perhaps qualify for a show cave of local importance. Two shallow-bottomed, single occupant boats moored on a 'beach' by the side of the stream testified to the navigability of this section of the cave. Not much further into the cave, we encountered high level development situated directly above the stream. As we surveyed along this towards the entrance, we half expected to meet up with the dry team, but this apparently obvious connection was never made. Back in the stream, several stretches boasted sizeable white stalactites and flowstone, and at

one point the stream widened into a chamber containing straight columns, like pillars holding up a vaulted ceiling. The water was warm compared to the outside and the air thick with steam. With the pillars, this gave the slightly surreal impression of surveying through a Turkish bath.

Hours later we had run out of wading-depth stream, had first crawled (Martin H: "if this does not improve I'll turn round") and then walked along a wide, muddy, flat-bottomed passage interspersed with puddles. Finally we reached a dry, spacious chamber, home to bats and arthropod wild life. Two ways on were found. Well, the minister had announced the cave was 'very complex'.



We first went for the slot in the floor, named 'Thumbs Up' by Sweeny. Thumbs up turned out to be a small (2m x1.5m) phreatic passage of constant dimensions, trending (south in a nearly straight line, very much like a drainage canal. To add badly needed interest, vicious, jagged submerged boulders, occasional swims, and various arthropods made a re-appearance. A side passage quickly ended in a sump. Shortly after, we encountered an eerie, thick, tangle of long, tentacular white and brown roots, hanging from the walls and surface and wafting around in the stream. These and fresh tasting air strongly indicated that the surface was near. Nevertheless. the passage showed no signs of wanting to end. With time running out we decided to turn round.

After a day's caving in this 'tiny limestone noggin', the main passage remained unfinished, and a further two side passages, two holes in the doline, and the stagnant resurgence next to the original entrance were waiting to be explored. Martin Holroyd had had enough of the unsatisfactory dimensions of this cave and went

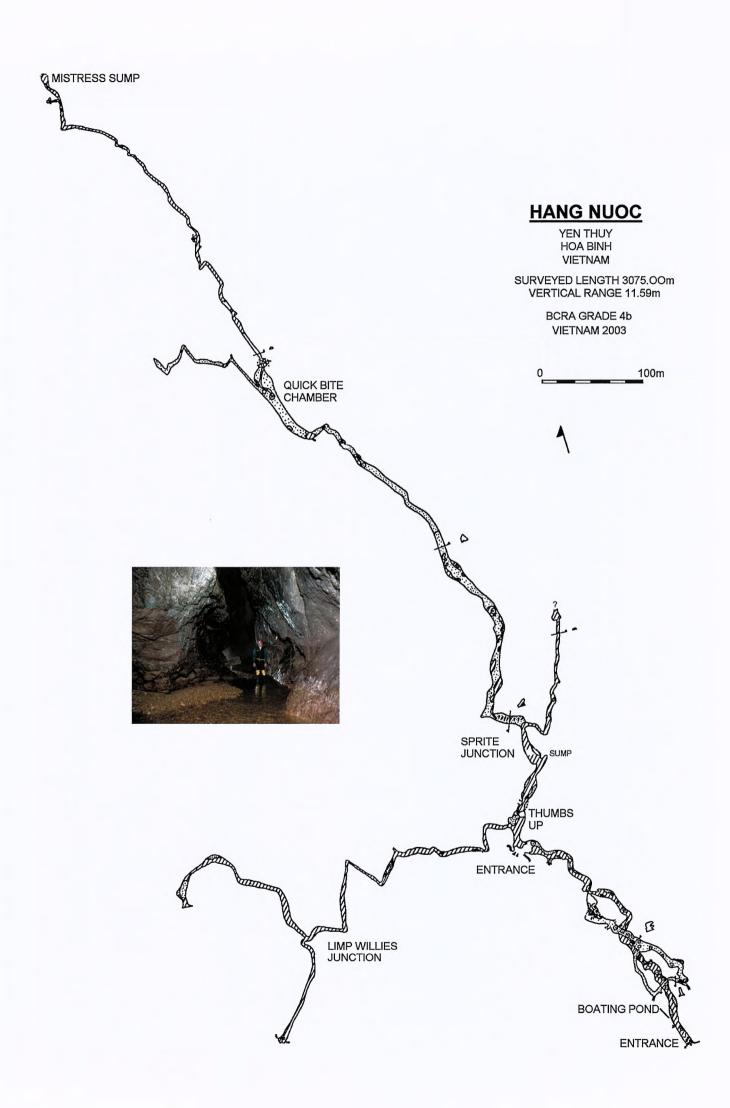
off to do something else, but Sweeny, Martin Colledge, John Atkinson and I returned to finish the caves in the 'noggin' the next day.

The canal ended in a duck after another 200m. Martin C explored the continuation, but due to the low and flood-prone nature of the passage, this part of the cave was declared finished. Returning to the dry chamber, the second way on (have we got no names for these features???) led through a series of flat-out muddy crawls and wallows into a final chamber with a steeply angled, solid, bedding plane roof. This draughted, and tiny chinks of daylight suggested another entrance behind a solid, impassable choke.

The flooded side passage near the distillery went for over 800m to a sump. Most of the passage could be accessed by easy wading on gravel and sand (no lurking boulders), although we had to swim on occasion. On the way back, I discovered a side passage we had missed on the way in, and had hence omitted to create a survey station nearby. This was rather embarrassing, and we spent some time reconstructing a number of non-permanent stations from drawings, memory, and repeat measurements, until we were confident that we could tie this passage in. Beautiful white limestone and a solid mud floor soon led to a third entrance, opening into a semicircular bay. This one was similar to our original entrance, but minus a farm house. GPS readings indicated our original entrance was a mere 500m away in a straight line. A combination of following the edge of the noggin and climbing over a pass saw us back at our first entrance. Two days into the tiny noggin, and we still had the holes in the doline and the stagnant resurgence to survey.

Hang Nguom Nuoc II

Sweeny and I got a lot of stick, but we insisted this tardis of a noggin should not be left unfinished. Would we get anyone to help us survey to the bitter end? For the third day, we had Duncan Morrrison along, but like John the day before, he had caught the dreaded 'lergy' and decided to remain in the car for the day. Sweeny and I quickly proceeded to the distillery entrance and climbed into the first high-level hole to the right. We were in for a surprise, as this hole turned out to be a single 15m high chamber, choked with the most amazing huge, white, wedding-cake decorations. Having



surveyed our way through and out of the chamber via a high level second entrance, we decided to ignore the obvious continuation hole at the opposite edge of the doline, and returned to the original entrance to survey the remaining lead, the small stagnant resurgence. We were in for another surprise. Initially low-roofed, this passage soon enlarged. We ignored a smaller, dry side passage near the entrance and continued swimming along what we assumed was the main passage. The cave required swimming until the sump. The passage was featureless, would clearly flood to the roof in the wet season and carried on in this manner for 200m. A distinctly Yorkshire style inlet with a shelf and a stream digging its way through in the middle yielded a further 200 m with much more interesting going. just as we were about to call it a day due to time constraints, the inlet terminated. We hastily made our way out, leaving the dry side passage near the entrance for another visit. After three days of caving, this side passage and the remaining hole in the doline still remain unexplored. Some 'tiny limestone noggin'!

Anette Becher

HANG LUON

The day got off to a good start! Our interpreter went off with one of the other groups, so Miss Thuy told Mr Zip (the local Vietnamese helper) exactly what we wanted. We were going to the next district, where we had permission to go to the caves with water in them. But not dry caves. So three of us (Snablet, Martin C and I) set off to Lac Thuy in search of chasms measureless to man.

The expedition got off to a good start as we ended up at Nguom Nuoc, which we had done the day before. The jeep driver had words with Zip and we set off in what was the right direction. An hour later we arrived at District HQ and Zip went and asked if it was ok for us to visit the local caves. We were asked to come into the HQ for tea, whilst they checked our permissions. We were also informed that they were out to lunch and did we want to join them. No we said, we just want to go caving! An elderly gentleman turned up and indicated that he had a boat that we could hire to get to the cave. So our driver intervened and got it sorted for us to go caving. We went down to the local river, got changed and hopped into the boats for the trip across the river into a large entrance that we could see.

Once across the river, we stayed in the boats for the 1.3 km ride through the cave. Odd, never been caving on a boat before!

When we landed at the far side on a mud bank, Snablet put on his wetsuit and went into daylight, and we started surveying. Snablet did the instruments from the water, I took the tape on one boat whilst Martin C lounged on the other boat. After two legs, I got in the water, as I figured it would be easier and more accurate.



The cave is 10 m wide and 10m high. The trip back involved a lot of swimming and some wading. It is also popular with the locals, who seem to take pleasure trips through the cave, and they thought it was highly amusing when they saw us in the water. There are quite a few nice formations, which the locals haven't been able to vandalise. Once out on dry land, we paid for the boats - 40,000 Dong, not quite 2 quid. We went back to the district HQ to say thanks. Problems! The president wasn't sure about our permission. We were shown to a different room and given more tea. People were sent to make phone calls, and bits of paper were examined very carefully. Then all of a sudden, the President came round and joined us for a cup of tea. He even told us where there were some other caves.

Unfortunately, the next day we were moving on. So we left and went back to base. It turned out that we had been technically arrested twice in one day. We didn't know, but it only goes to add to the experience and adventure.

Woody

LANG SON PROVINCE

This area was first explored in 1992 in the districts close to the town of Lang Son with over 13km of caves discovered. In 2001 Lang Son was approached via the Cao Bang border and the potential soon realised and we were keen to return during the 2003 expedition.

COC CHI

We strolled through pleasant fields with a dry river bed lazily meandering along the side of the hill, appearing to sink in various places. However, our guide insisted we head for a group of boulders half hidden behind a clump of bamboo. Predictably our guide was right and a small entrance was revealed from behind the boulders and bamboo.

A short scramble over boulder filled chamber leads to a daylight shaft with large passage continuing straight into the hillside. We followed a large passage on the right taking a draught. This continued as a main fossil passage adorned with gours, stal formations and Chris's clothes. Beyond a static pool a canyon cut down to the left leading steeply down to a muddy stream passage. A short crawl led to a small muddy sump pool and two high level leads were explored but connected back into the passage. Returning to the original junction the fossil passage continued with a noticeable draught. A small drop through a narrow passage was descended into a lower fossil passage that ended abruptly at an 8m pitch (rope useful). This dropped into a superb 10m wide dry river passage with a beautiful arched roof.



Eagerly we set off surveying downstream in a passage of fine proportions for approx. 200m

until daylight was reached. This turned out to be an entrance up a steep slope. 40m further downstream another entrance was passed. The passage continued in fine style through clean washed meandering tunnel. Beyond, a final exit was reached with a lake to the right. This finally sumped despite Sweenvs attempt, having passed a short duck/sump with Deb acting as a floating belay. The art of chivalry died in this pool as Sweeny rewarded Debs's aquatic deeds by urinating in the duck. Returning to the bottom of the 8m climb the streamway was followed upstream through a choke and a low crawl to pass vet another entrance. Beyond the passage continued low until a final exit marked the end of the cave. Chris returned through the cave to recover the rope and a wardrobe of clothes strewn throughout the system, the rest surfaced to work out our bearings on the surface.

Woody

NGUOM BAN SAN

First explored in a flash 11/2- our trip in 2001 for 1.6km, the way on was wide open, and a prime grab for this expedition. A team of 5 set off into the cave with 2 to pick up inlets and the other lucky 3 to push on downstream. The villagers of Ban San were amazed to see a group of hairy cavers donning rubber suits in the pouring rain and laughing when we flashed our tackle. Vietnamese people especially in remote areas do not mind checking out cavers and no matter how you try to change discretely there are always lots of faces peeking at you. A visit by us, the first westerners to journey into these parts created quite a stir and were without doubt the highlight of the week. All the villagers tried to force local rice wine down your necks whenever we appeared and it was only by saying we would have a drink when we returned could we escape the first offerings from these incredibly friendly people. Drinking rice wine at 9am or earlier in the morning just before a caving trip is not recommended however hospitable the Vietnamese people are. As one member quoted during the expedition 'what I do for British caving!'

A 15-minute walk through paddy fields led to the base of a huge limestone cliff several hundred metres high. The cliff had two sizable streams entering at its base. However the entrance to the cave was a dry entrance higher up from its base

involving a couple of climbs down to the streams we saw on the surface. On the way to the end of the 2001 survey we passed a number of inlets and the 2 other members set off to explore/survey as much as possible. We soon passed the 2001 limit, which stopped in a wide bedding passage and commenced surveying. An excellent draught was present and along with a good 200m echo we fancied our chances. The first 300m involved mainly stooping passage with fine stal decorations.

The cave followed a familiar trend to the N/E. The passage then started to change in size again to more classic Vietnamese stature. Excellent formations are seen throughout this section of streamway. A few small inlets were checked, some superbly decorated with crystal gours and cracked mud floors. After 1km of surveying this fine streamway, a large junction was met with a large inlet stream entering from the right. In true grabbing style this was left for later and after quick power bar stop the survey continued. Now the passage went big and the explorers started to bag the first of many 50m legs. With average dimensions of 30m wide and 25m high the passage was a joy to explore and the reason we keep on coming back to Vietnam. Vietnam really has some top quality limestone and this cave was not the exception and much of the passage was in solid white/grey limestone.

In the distance we could see a lots of stal appearing and wondered if the cave would stop but the excellent draught convinced us that this would continue. The main way did lead to a constriction, which involved a swim so the 2 non-swimmers persuaded the 1 swimmer to climb up a boulder slope to a small rift, which had a powerful draught. This led to a balcony overlooking the main passage continuation. A 15m drop stopped progress, but a short climb down another rift and a short crawl over gours led to an easy way down to the main passage. The main passage now is a superb tube and after surveying some more quality passage we came upon another entrance.

BAN SAN and LUONG XA

After numerous tales of fantastic passage in romping streamway and numerous km of surveyed passage I finally made it in. The plan, to return to junction 106 to explore a huge inlet, which possibly linked with Nguom Ban Sien.

Then, if time allowed exit the cave and look for the continuation.

Martin, Duncan and Deb accompanied me for the trip as we dutifully followed behind the original explorers who were intending to take a photographic record of the cave. At the start point for the photos we were released, armed with directions we were like unleashed animals racing along fantastic stream passages until an exit was seen and the start of our inlet.



Described as 'massive' with a 100m echo we were excited to discover that the inlet was just that. Faced immediately with two leads Deb headed off on a recce leaving the male trio to continue the survey. Following the left wall we soon entered a high chamber with a steep boulder slope to the right and ahead. With accompanying whoops of joy we struggled to illuminate our surroundings.

Deb had rejoined us and again dutifully climbed high up the boulders to investigate the far wall and a black space that we could just make out. At the far end of the chamber the stream appeared from an uninspiring low muddy crawl. Above appeared to be a steep slope passing a fantastic stalagmite reaching over 25m. Our slope continued steeply until it stopped abruptly at a calcite wall with a passage beckoning above. Here the stealth rubber boots and 10m of 8mm rope were put to the test and with combined tactics the quartet stood staring into a large gour filled chamber. Cringing at every footstep as we crunched across the gours we continued surveying through an almost total blockage of stals into another chamber, sadly a terminal chamber.

Our descent of the climb was speeded up by a hand over hand absail. We now had no choice but to follow the low muddy crawl. After passing



through a number of stagnant pools we were almost relieved to reach a sump.

With plenty of time still left we headed for the previously seen exit, our intention to head into the Doline and to hopefully find a continuation to the system. We were greeted with a spectacular site, steeply vegetated slopes forming the sides of a long narrow cultivated doline with the river lazily meandering along the side. Ahead lay a small wooden house built in the customary way on stilts. The loud cries from a cockerel warned of our approach as mother hens hastily gathered the chicks into close supervision. From inside the dark room, wrinkled yet smooth faces stared curiously out at this bizarre picture of 4 wetsuit clad westerners passing through their property. The faces soon turned into warm smiles as we greeted them with a smile, wave and hellos.

Deb was soon testing her Vietnamese as she asked for information on other caves. Excited jabbering and arm pointing confirmed that caves lay ahead. Skirting the banks of the river we followed its course hoping to discover a large entrance. A solitary lady was tending a horse grazing on the meagre pasture, her friendly smile and wave greeted ours. Possible sinks were checked but none were caves, this became more frustrating when the river totally sank leaving only a dry bed to follow. A group of men watching over their buffalo's appeared cautious at our approach but soon burst into laughter at our attempts to greet them. Luckily Debs Vietnamese was better and after a short conversation they confirmed a cave lay ahead. On we went and 25 minutes after exiting the cave we met a second active river flowing towards us and joining with our river bed. Ten minutes later we stood, marvelling the entrance in front as the streamway noisily cascaded over a dam on its course into the cave. Time was pressing but with a cave ahead we reckoned we could leg it back in less time.

Climbing down the dam led into fine streamway and cascades. A short swim led to walking size passage and a junction on the left. Surprisingly both passages are downstream! To the right the main passage continued steeply down cascades. A grandstand view of the cascades could be enjoyed from a massive calcite formation on the right, which also proved the easier route. A second junction on the left was passed with water emerging from a choke and passing

through a hydro generator. We decided that water had been deliberately diverted into the first inlet and flowed to this second inlet to run the generator, though this was never proven as time prevented a full exploration.

The main way continued through a duck to large mud filled chamber and a sump. A climb up over silt banks led to a small phreatic passage containing stagnant pools and numerous 'rats', the cave was left at a particularly unpleasant stagnant pool, with a surveyed length of 464.9m. With time pressing we did in fact 'leg' it, almost running at times, returning to the jeeps at the prearranged time, just. A large welcoming group had congregated at the jeeps, watching, fascinated at our pale bodies as they emerged from our wetsuits. The loudest laughs were for Duncan who, without shame bared all.

We had surveyed another 2.4km making the main river passage a respectful 4.0km long and the cave 5,471m. We had surveyed another of our aims on this trip.

Howard Limbert/Martin Holroyd

BO NHON - Cave of the 150 People



Our arrival in Lang Son had been greeted with clear skies and extremely British temperatures, i.e. very cold. By the time we reached our target area near the Cao Bang border, "cold" had been replaced by "warmer", but only on account of a heavy, leaden layer of cloud. It was weather to which we are accustomed, but not in Vietnam. The windscreen wipers on the jeeps were working overtime as we drove into the heart of the Quoc Khanh karst.

Exploration during the 2001 expedition, most notably Nguom Ban San, had confirmed the existence of significant cave development on the Lang Son side of the provincial border and we now hoped to further add to the register of known caves. Our maps indicated four potential river sinks beyond Nguom Ban San and we immediately set out to investigate these features.

The weather had ensured that the tracks were only passable with care as we headed up the valley towards Ban Gi and the presumed easternmost sink of the Quoc Khanh area. The most notable hazard of the journey was not the track, but rather a lack thereof - an assortment of planks and bamboo poles laid across a stream bed. Despite having great confidence in the drivers, our bold crew took the view that being on solid ground was preferable to being in a ditch and promptly jumped out. The Vietnamese chuckled as they rattled over the bridge, no doubt wondering what we would do if there was any real danger.

At Ban Gi village, we quickly contacted the local President and Mr Phuc explained our objectives and showed our various letters of permission. We knew this point was very close to the border with China and anticipated a degree of caution from the authorities, hence we carried every official bit of paper we could muster. In the event, this was unnecessary - after tea and the obligatory rice wine, we were soon on our way to the cave.

We seemed to be getting conflicting reports regarding the nature of the cave – wet, not wet; big, not big; long, not long. In the end, we adopted the time-honoured expedition motto of "Sod it, let's go and see".

In fact, the Bo Nhon "sink" was a resurgence and it was heading 180 degrees in the opposite direction to that which we expected. A large entrance chamber was decorated by a very fetching concrete dam which in the wet season must hold back a considerable volume of water. We had been told that, in extremis, this entrance chamber could house up to 150 people. We quickly changed and started into the cave, along with what seemed like half the village.

A small rift traverse bypassed the lake formed by the dam and we were soon traversing gours and pools in an extremely pleasant passage. Climbs over gour dams were interspersed with traverses around deep pools. It was indeed big and wet and not short! How long remained to be seen, but the first few hundred metres certainly relieved the gloom of the weather and started to soothe the frustrations of our time in Thanh Hoa and Hoa Binh.

Initially, we were keeping a close eye on Mr Phuc as it was his first ever caving trip and we figured that an injured interpreter would not be a welcome development. A couple of climbs and traverses soon demonstrated that he was a natural and we even began to wonder who was keeping an eye on who.



Around a kilometre or so into the cave, our Kiwi note-taker's scribbling fingers were becoming a little fatigued and a pause for lunch was taken. Straightening out the curves, we surmised that the general trend of the cave was more or less due south and we began to speculate on how it might fit into the overall hydrology of the district. As if to confirm our thoughts, as we began surveying again, the cave promptly provided us with nine 50m legs with only single figure variations from 180 degrees!

After a chamber with a spectacular pagoda-type stalagmite, the way on became wetter. Donning wetsuits, we began to wade and eventually swim towards the sound of running water. After a low, windy arch, we emerged into a streamway flowing from right to left. The sound of a cascade proved in fact to be the water pouring through a concrete dam! At this stage, we were over 2km from the entrance and marvelled at the resourcefulness of the Vietnamese. Carrying concrete all this way must have been quite an undertaking. With a good lead upstream and a less appetising prospect beyond the dam, it seemed a good point to end the day's survey. We

exited steadily, rattling off a few photos for good measure.



The following day a larger team returned to give the cave a blast. In addition to John, Paul and Woody, Sweeney was added for his expertise in pushing small wet crawly bits and Chris and Danielle for their ability to ignore ridiculous instructions such as "Stand on top of those pointy boulders with your light off" or "Can you move 7 inches left to make certain of blocking the backlight". In reality, our attempts to do photographic justice to the entrance series were thwarted by technical faults/shortage of time/lack of enthusiasm/eagerness to get to the sharp end (delete as appropriate).

Woody and Sweeney ticked off the short passage up to a second entrance and then began the downstream lead. As we caught up, they could still be heard thrashing away in the small canal. We quickly began the upstream survey (walking, pleasant, long legs, ho ho!). From the maps it looked as though we had around a kilometre or so to the edge of the limestone, but we quickly emerged at a sink after a slightly disappointing 600m of easy walking. We had linked "sinks" 3 and 4, although not in quite the manner we had expected. At least we had solved the mystery of the 2km concrete carry!

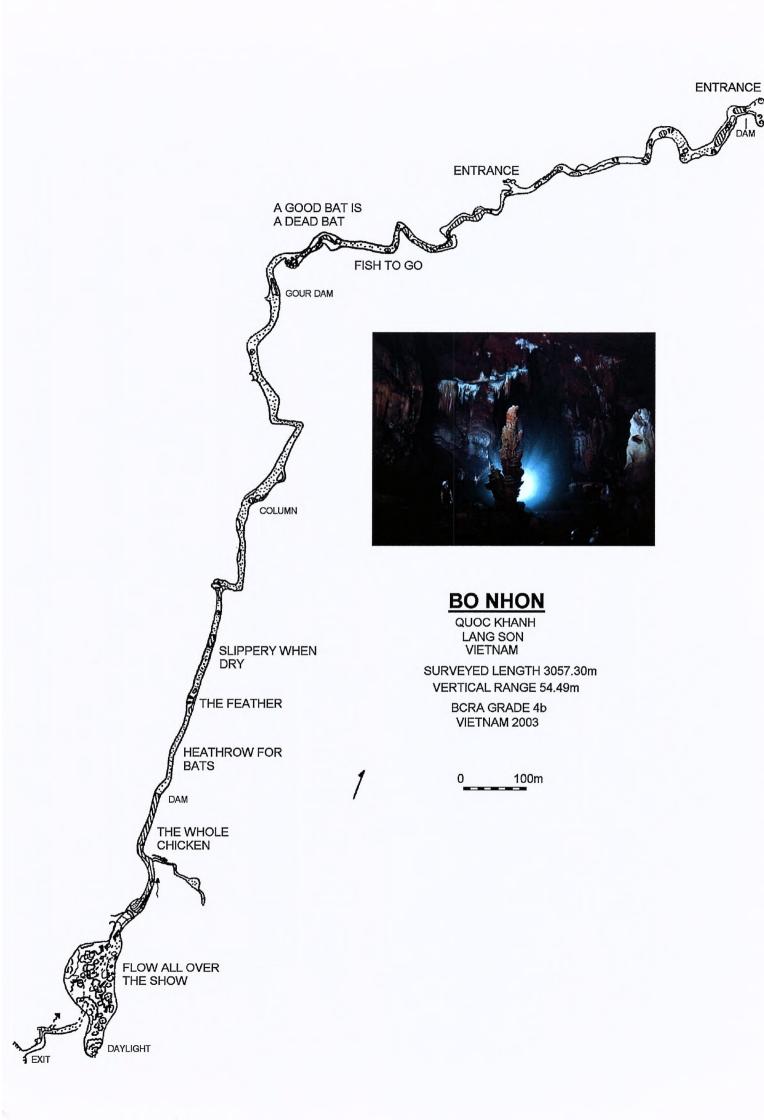
Heading back, we checked out the remaining question marks, including a climb up into a vast high level chamber above the sink. Daylight could be seen high in one corner and Sweeney made a bold free climb up a buttress and along an airy traverse near the roof. It was indeed the light from a fourth entrance, but Sweeney's quip of "It's going to be a bugger to survey that climb" was met with a unified chorus of "Oh no it isn't!" and "Come down carefully – we're a long way from home".

We exited without incident, only to encounter a small reception committee from the local army base, whose premises we were invited to visit. The camp commander greeted us with a smile, an iron handshake and the sort of steely gaze that you hoped never to be on the wrong side of. When he got out his Standing Instructions, we realised that maybe our attendance at the camp was not merely a social call.

Several pots of tea and a couple of hours later, after some extended questioning of our translators and the donation of a roll or two of film, we were on our way back to That Khe. The experience reinforced our view that no matter how many bits of official documentation you can amass, on occasion it will not be enough. Straying into an area just a bit too close to a sensitive border can end up with heavy discussions with those charged with guarding the country's boundaries. It is understandable and at these times we have found that being calm and patient is by far the best option.

In the final analysis, Bo Nhon accounted for over 3km of survey. It was a fine cave with some spectacular situations tucked away in a quiet backwater. The remote feel of the enclosed Ban Gi valley was only partially belied by the existence of satellite TV dishes on the rooftops of some of the wooden houses! Another story to be filed away amongst the many fond memories of the expedition.

Paul Ibberson



CAO BANG PROVINCE

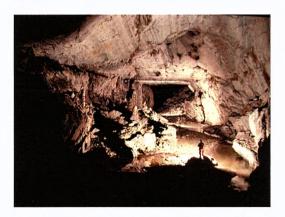
Cao Bang, a province in the north of the country bordering China has been visited on many expeditions before, always with excellent results. Longer than expected was spent in Cao Bang for the 2003 trip but again we were never disappointed.

HANG KI LU (The Deep End)

The cave's possible existence was calculated by virtue of the map showing a large surface streamway disappearing into the limestone karst. On this occasion we got exactly what it said on the box, a 5m wide stream disappearing invitingly into a 10m high entrance porch.

Eight team members, plus Mr Phuc_from the Hanoi University, were deposited at the end of the ongoing tarmac road & followed the gently descending, unfinished, track for 90 minutes into a distinct, enclosed, valley. The continuing track headed eastward paralleling a surface watercourse as it headed directly into the unbroken cliffs ahead. Perfect river-cave country.

Big scenic entrance, cool draft, knee-deep, gently flowing water. Excellent. It was decided to speed surveying up by splitting into two groups, Martin, Martin, Dinky & Duncan would shoot on ahead for an hour or so & then commence surveying while the rest of would start from the entrance & leap-frog past once we hit their first station.



Moving out of the daylight the cave grew bigger & bigger, the stream curving ahead with coarse sand beaches either side. Stal & calcite formations began to appear at regular intervals as

the passage continued ahead as lazy 'S' bends. No tape leg less than 30m, the roof & left-hand wall soaring out of sight, what could possibly go wrong? A roaring ahead gave the answer as the entire water entered a narrow canyon, doglegged right & dropped down a 5m deep, 1.5m wide rift! It looked free-climbable, albeit wet, but was this was the way the first team had gone or had they instead chosen the drier, & considerably larger, high level passage above.

The descending rift had a slippy, spray-hidden ledge 2m down from which a slight traverse out led to a drier climb down into a pool & short swim to a limestone ledge. Howard & Deb dressed only in Ron Hills & thermals, suffered from the spray, draught & short immersion. The passage, however, continued in sporting style having turned into a 2 to 3m wide, 4m high canyon with numerous short drops. Traverse, swims where unavoidable, climbs along & down, short 10 - 15m survey legs, along a washed in tree trunk led to a fine scalloped descending rift. Straddling downwards; a window of daylight appeared 25m above before the passage opened out into the bottom of a huge, sun-bathed doline.

No way could be seen to ascend the 30 or so metres to the jungle above but the cave clearly continued ahead in the same watery vein.

Moving forward the passage widened & dropped down a 3m waterfall, passable on the right, before a 2nd unclimbable 8m fall. It was decided to enjoy the sunrays at the bottom of the doline & take a welcome powerbar snack. It was clear from what we could see ahead that Howard & Deb would need wetsuits if they were to safely continue much further & we remained uncertain as to whether we were in fact still on the trail of the leading group or not.

Looking again at the unclimbable 2nd waterfall, a dry descent on the far left of the passage was spotted. Dropping down a traverse on the left-hand wall led into a fast-flowing, steeply descending rift with the sound of further waterfalls. Ahead the water dropped 8/9m in a torrent of spray into a further sun-lit chamber revealing the magnificent sight of a distinct spiral of mist swirling up and out of another doline entrance. Even better, a tied-off expedition rope and cunning trail of ingeniously belayed tape slings proved the first group to be ahead. Their dry route led to the chamber bottom where a note on a large tabletop boulder

confirmed it as being the 1st team's starting station.

Turning round we headed back to look at the massive continuing dry passage above the 1st wet climb. This continued as an ascending balcony high on the left-hand sidewall. Once proved as a going concern we decided to call it a day, as we knew we would have to return tomorrow with photoing gear. Back at the entrance & after an hour's lazing in the sun & rehydrating the 1st team returned to say they had pushed the cave to a conclusion having followed the wet ongoing passage out into daylight.



Lower streamway (goldrush series)

The thrill and excitement of the cascade series had our adrenaline for exploration pumping even harder having already grabbed the first 800m. Now it was time for us to do our share of the surveying. The large block that formed the belay for the final 3m-ladder pitch was our start point. A hastily scribbled note was left for the following team to mark the station. As our eyes struggled to adjust from the sharp bright light of the open shaft above, a chilly 20m swim led gloomily into darkness, particularly for Martin minus a wetsuit. Ahead a wonderful stream passage meandered gracefully into the darkness. Wading through canals, large mud banks would provide respites and allow survey stations to be constructed, enabling an accurate survey to be

maintained despite our rapid progress. A fishing net lay on one bank overlooking a large pool, evidence yet again of the resourcefulness of the local people. Further on a large catfish lay motionless upside down at the edge of a pool. A 'missed catch' or 'natural causes,' its size was reason enough to understand why locals came here to fish. As we meandered downstream with haste, Snablet's light could be seen in the distance piercing the blackness, giving an excellent perspective of the ever-increasing dimensions. His cries of excitement hinted to us that it might be good. The passage increasing up to 20m wide and 3m high with large stal bosses littering the cave, at one point almost blocking the way on. Where the canals and lakes became shallow the stream noisily cascaded over cobbles. At times I felt the need to run down the passage in order to keep up with Martin & Chris as they rapidly took the cave measurements, their shouted figures echoing satisfyingly around the passage. Finally, almost with relief Snablet confirmed we had reached an exit. Suffering writers cramp I completed the notes whilst Snablet and Chris vanished onto the surface. On their return a few minutes later, they had in their possession a fertiliser bag marked with Chinese writing. This conjured all sorts of covert stories, had we reached China? We felt it best to retreat back in to the cave for a snack attack just in case we had.

We had completed over two kilometres of surveying on top of the grabbed passage. As we returned through the cave I had time to reflect on the cave. Ki L u for me epitomised a classic Vietnamese adventure. A possible entrance identified on the map requiring a long walk through beautiful remote countryside. The people we met were always friendly and helpful and for once didn't drag us into their homes to share rice wine with us. The only electricity was from a home made hydro system at the entrance to a huge cave passage. Massive passage, followed by a superb series of cascades finishing with a long section of river passage involving swims and formations completed the perfect trip. The banter didn't disappoint either.

High level series

Howard, Deb, Martin, Woody and Sweeny returned complete with big bulbs, the infamous, grey hair turning, exploding flashguns & cameras with the intent of photographing the

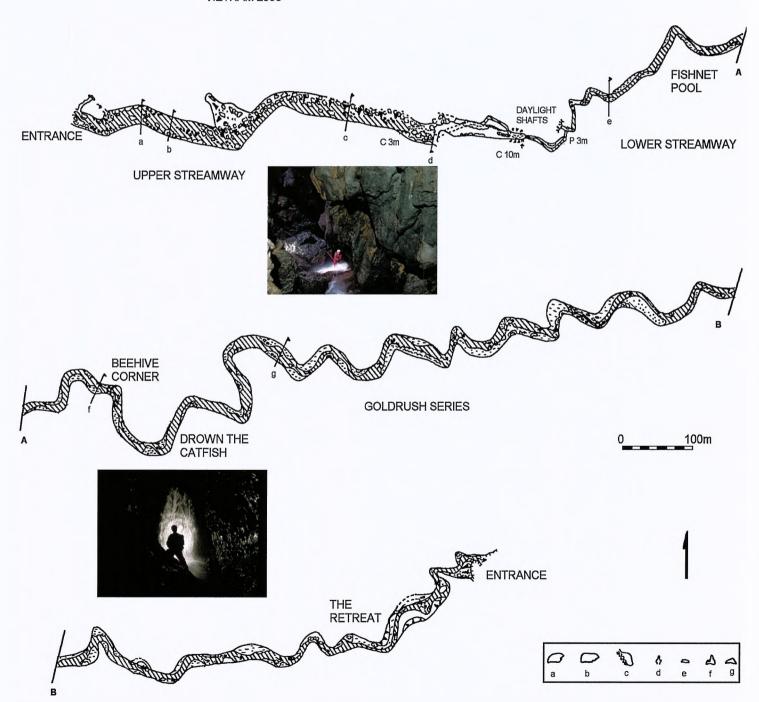
KI LU

PHUC HOA CAO BANG VIETNAM

SURVEYED LENGTH 3353m VERTICAL RANGE 82.00m

> BCRA GRADE 4b VIETNAM 2003





cave & continuing the high level exploration & surveying.

Just into the cave, the group was surprised to be passed by a Vietnamese spear fisherman complete with Chinese dry-cell headtorch, looking to catch fish caught in pools along the main passage. Happily posing first for photos in his rudimentary kit; he then insisted in showing us the hidden footholds along the deep, wet bits so as to avoid total immersion.



The high level passage continued in magnificent fashion. Massive calcite encrusted walls & a high, high roof. An exposed route on the left-hand wall, with a large drop on the right, led upwards for about 250m until eventually daylight could been seen in the distance. An 8m climb up a calcite wall exited onto a ledge high above the first doline entrance where we had yesterday taken had our powerbar break. This chamber & the continuing fine ribbon stream could be seen far below but above a thin trail through increasingly thickening vegetation led upwards to the rim of the doline & out onto the surface.

With the survey completed the final task was to photo the main passage & take some action shots in the streamway below before exiting into sunlight & changing for the long walk back. This was enlivened by Woody standing on a bamboo stick causing it to snap & spring upwards to pierce his calf leaving a deeply embedded tip. This was later removed back at base camp by Dr Dan with the assistance of Sister Morphine.

All in all a very enjoyable & sporting trip.

Sweeney/Martin Holroyd

BAN THOUNG

Wow this looks promising! We'd had along walk in with camping kit and were stood on the edge of a large depression. A rapid descent, a chat to some locals and we were off to meet the village headman. After formal introductions we were told of a cave that went "through the hill" and were guided beyond the enticing river sink to a high level entrance.

The cave entrance was wide and inviting, it had a roof soaring upwards at about 60 degrees and was smothered in huge jugs "wow" I said "Jugs Ville". The locals had already promised us much, saying that they had been into the cave as far as the river. The plan was to split into two teams and survey past each other as we progressed into the cave. Martin, Chris and Snablet (Team 1) would start the survey from the entrance, while John, Dannie, Mr Fuche and Duncan (as Team 2) would push on into the cave as far as the river and would start surveying from there.

The problems started at this point. Team 1 entered the cave and like a well-oiled machine disappeared with shouts of 50.4m echoing around the enormous entrance chamber. We hesitated. We had no water for the carbide lamps and rather than walk the 5 minutes back to the river outside the cave we vainly searched for water inside the cave. All the time a panic started to wash over team us we were missing out on our part of the cave. Eventually water was located and we entered the cave. Panic over we quickly located the others, who were finding that the way on was not immediately obvious. So fuelled with water we surged on ahead with

much haste. We were later to receive criticism for not rigging the climbs which we had hardly noticed in our rush. The cave continued to get better with some stunning passages and some nice formations. We soon found ourselves on a pebbled beach of a 3m wide river with the sound of water falling ahead....

Time for wetsuits. We began to get ready. In feverish anticipation of what lay ahead. Then we discovered that, some how, the survey tape was not with us in the cave but back at the house where we were staying. The recriminations started as our mistake was realised but we quickly decided that the blame was to be shared. Following discussions it was decided that we did not have time to finish the trip and the best bet was to tell the others that perhaps they should continue to survey while we checked out the

passage ahead. The reply of "get stuffed" made it clear that they were not keen on this idea. With this clear, I was dispatched to retrieve the tape along with Mr Fuche, while Dannie and John continued downstream with the others.

Following a dash of 90mins, I found myself back on the beach and ready to start the surveying. Dannie and John met up with Mr Fuche and me again, reporting that downstream was looking really good and the others would continue with this and that we should begin surveying upstream. This did not seem such an appealing option but in view of our incompetence so far during the day we felt we had better do as we were told!!

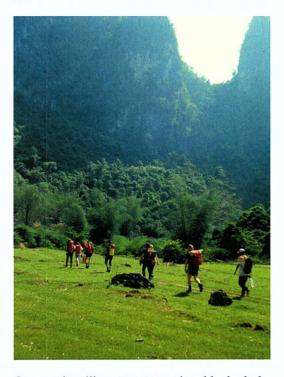
Sure enough the passage felt very stale and after only about 150m it sumped. We returned to the beach for discussions. John was keen to check out a side passage 50m downstream, so following a discussion we decided to pursue this. The swim downstream was immediately impressive with the current picking up as the stream passed through a constriction with the roaring ahead of Niagara Falls (a 30cm drop). The passage opened out into a much larger section of stream way with the side passage we were interested in going off on the right. This side passage initially appeared to travel 100m where it developed into a steep boulder slope. Mr Fuche was reluctant to stop at this point and found, among the boulders, a continuation swinging off to the right. Excited, we entered this and it soon developed into a substantial passage. What was more, we could hear water ahead.

The passage was followed for 100m to the river, which turned out to be a bypass to the upstream sump. The river now in front of us was very spectacular and we all cursed our decision not to bring cameras (the location of the cave close to the Chinese border meant we were nervous that they might be confiscated). The river was 7-10m in width and in the 50-70m that our lights penetrated there were four 50cm cascades as the water fell over the remains of gour pools which dated from some earlier stage in the development of the cave.

Excitedly we began our survey upstream and found the cave continued to impress. After 250m of surveying almost entirely in the water both John and I, who were both in 3mm wetsuits, were getting very cold. Not for the first time Dannie was keen to continue and so she left the

lads huddled on their ledge, coming back after 30mins to report that the passage continued in the same vane.

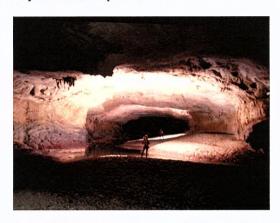
With the time at 22.00hrs we decided to call a halt for the day. We made our way back through the cave to the village where we were to stay for the night, in the house of the village president. As we passed back through the cave we were once again impressed by the size and beauty of it all.



Once at the village we were quizzed by both the other Team, keen to know how we had got on, and also by the villagers who were interested to find out what happened in their cave. This interest can be easily understood when they explained that the Chinese had used the cave during the 1978 war. That evening we made plans for the following day and the Teams were rearranged. Dannie opted to join Team 1 and go downstream, with Snablet preferring to go upstream with Team two, even knowing that his swimming strength matched against the strong current would mean that he would end up out of the cave! Mr Fuche would not come either this time.

The next morning saw us waking early, all the worse for a poor nights sleep. Apparently we were staying on a frog farm and the frogs had been very vocal as had the cockerel that lived under the floor of the house we were staying in.

John, Snablet and I moved quickly to our last survey station of the night before and began to survey on upstream. The cave continued to develop in the same vain as before with the dimensions increasing up to 15m. continued to cross a number of further small waterfalls. At this point the roof began to lift and the right wall became a very large 75m high boulder slope. What became apparent was that we were in fact entering a very large chamber (The Mulberry Bush). This later proved to be the confluence of 3 rivers/streams. continued following our river upstream and after a climb up a 2-3m series of cascades we found ourselves in what proved to be the continuation of the river. This was followed for a further 150-200m and finished at a boulder collapse which was entered for a few meters until no obvious way on could be spotted.



From here we returned to the cascades. The two streams, coming in on the right, were then followed to attempt to find a way on from here. The first of these continued for 75-100m through some very large boulders until it became too tight to carry on.

In an attempt to trace the second inlet we travelled over the top of the boulders and found a route back to the inlet. This was followed upstream for 20-30m and here again it was blocked by loose boulders but with a large black space ahead which echoed. At this point with a long walk out still ahead, we decided to exit the cave leaving this possible lead for another day.

Ah! the mighty Niagara Falls, soon passed and on to a swirling pool and water chute to an uninviting rock strainer. A traverse and scramble down quickly led back into the stream way that grew to impressive proportions. Much wading and swimming along the rift passage followed; the occasional roar of water ahead being

completely out of proportion to the size of the cascade that was generating the noise. Many of the survey stations were in deep water, our ace swimmer Snablet spluttered at times, but we were driven on by our dream of caverns measureless.....

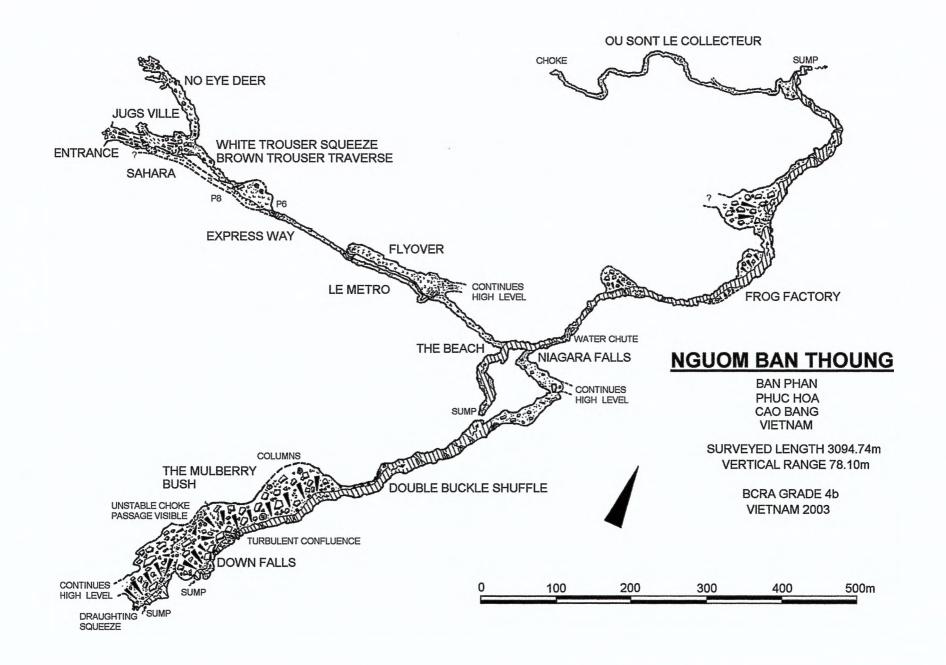
On route we were intrigued by a number of soft calcite barriers that spanned the stream way, creating much welcomed dry survey stations. Large breakdown chambers were passed and the rift passage grew taller. We came to a halt on the first day beside a small streamside pillar of rock, a dry stance at which to recommence our survey.

Swimming out against the current was strenuous and we were glad of a celebratory glass of rice wine back at the village. Sleep that night was fitful. The under floor frogs were turned up to volume setting ten. An early start next day and we soon returned to our aqueous surveying. The stream continued in fine style past another huge breakdown chamber and many crusty formations to eventually end at a sump. A SUMP? "I thought this cave went through the hill?"

The sump pool was complex, several options through low arches all leading to the same conclusion; no way on for air breathing mammals! A ledge gained by climbing out of the stream gave way to an ongoing passage. Though long this passage was of relatively small proportions, being a mere inlet to the system rather than the sump bypass we'd hoped for. On our way out Dan and I enjoyed a welcome break from upstream swimming whilst Gollum (Chris) was despatched to check out the breakdown chambers. Alas, his probing into the bouldery jumble was inconclusive.

The sump is still several kilometres short of the likely rising of this cave near to the Chinese border. This sump and the upstream leads await future exploration, there's obviously much more to find.

Duncan Morrison/Martin Colledge



NGUOM CHIEM

9am & a lean, mean, (ok well 2 out 3 of us) recce team of Snablet, Woody & myself set-off from where the jeep-passable track ended at a small village. Ahead a 5k long, 600m high ridge bisected the valley floor with higher, densely foliated, karst behind & the now walking track continuing eastward, a small sign indicating that it was being improved to jeep status courtesy of EU funding!

Leaving the jeep, driver & usual curious villagers behind, the most obvious of the various continuing tracks was followed with a view to working our way behind the ridge to where the map theoretically showed surface water to disappear underground. Carrying minimal tackle (slings, 10m ladder, 30m rope) a pleasant east & then northward stroll in beautiful karst scenery for 1½ hrs led to another village & then backtracking to find a missed westward junction. Along this & 1 hour later, just as we came into view of our final intended village destination, a substantial cave entrance could be seen high up in the cliffs ahead.

Snablet explained to the attentive locals that we where looking for 'hangs'. They understood but stressed we would need a guide. This was a little surprising as even with my suspect sense of direction & poor eyesight it was hard to miss the overlooking bloody big hole 3k further on & 300m higher. Nevertheless politics dictated we graciously accept the offer & so we followed on behind 5 villagers as they raced across the valley floor, each vying to show the way.

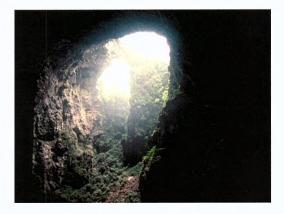
Crossing the surface stream, the path headed steeply upwards. Climbing up limestone blocks, over & along tree trunks & a crawl through fallen trees led eventually, & sweatily, to the entrance. This turned out to be the top of a dramatic doline drop, the opposite wall being some 100m across and with a magnificent daylight arch high above. A truly classic entrance. The guides called the cave Ngoum Chiem

Having expected sinks & resurgences, coming across an entrance pitch proved somewhat unexpected & awkward particularly as we had brought no srt kit. A bungalow-sized boulder split the top of the pitch &, looking down, the floor of the doline could be seen 60m below. To the right of the boulder a very thin trail skirted

down a steeply inclined path. Throwing down the 30m rope as a handline, this was followed to a vertical 8m drop onto a ledge. Tying the ladder on to the end of the rope allowed the drop to be passed as a very bouncy pitch. The ledge below was some 10m above the top of the sloping floor of the doline and split by a slippy, 2.5 m wide gash spanned by 2 dubious looking lengths of cut tree/vine. Despite being tantalising very near to the floor; no obvious safe way on could be seen & so a retreat was made with a view to coming back with rigging gear.

Back down to the valley bottom, the accompanying guides were insistent that the only way back to the jeep was via the way we had come & we should have a drink (& by this we presumed they meant the ubiquitous & highly potent home-brewed rice wine) with them at their village. Desperate to avoid this kind offer, being mindful as to the subsequent consequences, we were equally insistent that we must continue down valley & look for were the map indicated the surface water disappeared. Reluctantly, & with much shaking of heads, the villagers trooped one way & us the other.

4k on the landscape opened up in front changing quickly from tropical forest to deciduous wood. The trees thinned into a beautiful pasture of almost golf course like trimmed grass before crossing a stream flowing towards us. Across & up the opposite banking our pace slowed as we discussed the significance of the water direction. We agreed we had followed the surface water downstream before climbing up to Nguom Chiem yet here we where, still in the same enclosed valley, now going upstream. A light, albeit dimly flickered, slowly into life.



Turning round we followed the right-hand banking. The fast-flowing stream was some 3m

wide & 1.5m deep, the banking 4m high. Obviously in wet weather this took a tremendous torrent. 1k along and the stream turned left into the cliff. Disappointingly the cave entrance proved impassable being completely blocked by jammed tree-trunks although we agreed a couple of hours work might perhaps allow access to the cave beyond.

A powerbar break confab & it was decided we would return with the primary aim of descending the entrance shaft of Nguom Chien but, if that did not pan out, then come back & have a go at getting past the log jam using rope & pulleys.

Continuing to the end of the ridge ahead, a steep whaleback climb with plenty of limestone steps led to the original valley with the parked jeep arriving back at around 5pm.

Same group as yesterday plus Andy Jackson & Miss Honh from the Hanoi University.

This time rather than heading to Nguom Chiem entrance via either the east or west ends of the ridge, we took a route from behind the village school & headed straight up the centre of the ridge to a col before dropping down near where we had picked up the guides yesterday. Rather than 2 ½ hrs, we were there in just under 55 minutes.

The same guides followed us to the cave entrance. Dropping to the left of the huge entrance boulder, a hanging belay was tied round a convenient tree and a tension traverse made to the yesterday's stopping point at the ledge 10m above the doline floor.

From this point two possible routes led on, either stepping across the gap & following a very slippy climb downwards or place a bolt & simply drop straight down. Decided on the latter as being the safer option & duly gardened the ledges of the loose rock &, in particular, the 4m lengths of timber bridging the gap. These went down with a grand bang much to the consternation of those at the top unable to see what, or indeed who, it was that had gone crashing down. Once gardened I concentrated on whacking in a bolt. It came as a complete, heartin-the mouth, shock when halfway through this process I felt a hand firmly grip my shoulder as I was unceremoniously used by one of the guides as a stepping stone to cross the gap. Whilst I sat & gibbered with many f's & c's; he merrily

continued along the wall disappearing in his bare feet down the slippy climb that I had disregarded as being too dangerous!



The final 10m drop was over an overhang & close to what turned out to be a scarily mobile wall. Once at the bottom, & well clear, the rest followed whilst the guide returned back to the surface.

The way was down through thick vegetation slowly thinning as we approached the bouldery doline floor. Making a clear survey station the group split to explore the ways on. What appeared to be an obvious passage directly opposite the entrance proved to be nothing more than a blind rift. Following the walls down to the deepest point resulted in various pits, climbs & rifts, all investigated at length but with no success. Thinking what a bugger, I rejoined Snablet & Andy, back from their own fruitless searches, for a much needed drink. Only Woody remained missing & he had apparently had taken the least likely of all routes by climbing straight up the wall opposite to the one we had abbed in from.

15 minutes or so passed before Woody eventually scrambled down, his big grin saying it all. "Nothing up there other than this big fuck-off passage running in both directions". The most unlikely of possibilities had proved the winner & what a winner at that. Up the 30m slope, at times simply relying on friction, to a levelling off. Leftwards & the passage proved to be a balcony ending in some fine formations but rightwards..... Awesomely large passage, pristine white gour climbs dropping down climbs into a continuing tunnel. Long survey legs clicking off as the cave trended away north east in fine style. Utter jubilation.

10 minutes in & I have the tape at point with my back to the continuing passage, Woody taking the clino & compass readings off my lights. Peripherally, a large stick 2m from my left leg begins to slowly move in a suspiciously sinuous manner. I shout "snake" in what I intend as a deep, manly, voice but in reality comes out as an inaudible whimper. A higher pitched attempt has the desired result & the others come bounding down to look. The 11/2m, brown, red & green banded serpent doesn't like the attention, particularly as Woody & Andy want close up photos, makes ominous hissing noises & coils into a spring. Finally Hissing Sid retreats into a wall pocket & makes a stand. We continue on with the surveying but taking a more noticeable interest at what is at foot level.

The cave continues as an absolute cracker, light calcite walls, pristine gour remnant floor, large squared passage, until it narrows to a 30m drop into a black canyon. High up the right, a faint dot of daylight is spotted. The drop looks climbable and a rope is belayed round a convenient boulder & thrown down. The wall is a steep incline of very grippy calcite, dropping in small increments to convenient ledges before a final exposed 6m drop unto the floor below.



In front a T junction, large passage running left & right. Initially we head right towards where we had seen the light. 80m on & we are in a calcite box canyon looking up. The way is upwards but would need ropes & other climbing paraphernalia. Andy heads back left whilst we look for easier ways upwards & then comes back after 10 minutes shouting he's found the way on and had heard roaring water ahead!

Snablet maintains surveying discipline as we struggle not to simply rush on ahead. The passage has reduced to about ½ size and leads

down two "interesting" climbs to Andy's final point, a narrowing of the passage to a beautiful, calcite-floored, balcony with a 2m x 3m doorway through which the noise of thundering water can be heard far below. We try & guess the size of the pitch ahead, 30, 40, 60m? In an attempt to get a better look Andy & myself are lowered over the bulging calcite to a further ledge 2m below. We slide forward, peer nervously over the lip & in the main-bulb x-ion light faintly glimpse the source of the noise & noticeably warm, upward, draught. Magic, we have hit a main streamway.

Combined tactics prove necessary to climb back to the others. Big grins, loads of excitement as we speculate how far down to the water. Superb, superb, superb. Then outwards keeping an eye out for Hissing Sid on the way

Same team as yesterday - plus a horse.

The latter proves particularly worthwhile as we are now carrying 4 bags of rope & bolting kit, photography gear plus wetsuits & personal buoyancy aids & it's another scorching day.

Knotted sling, used as a chock, pulls rope away from the loose wall on final part of the entrance pitch. Cave photographed on way in, Andy carrying tripod, camera & Darren drums looks like something out of Rambo.

Change into wetsuit & lifejacket at head of pitch, Woody shooing off a tarantula as we search for belay points on the right-hand wall. 50m rope tied off & abb down to yesterdays ledge. Large & solid calcite boss makes a perfect re-belay then down into new cave. A massive ledge 4m down & then a big drop into the river below. Various ways down, right wall, left wall or behind this ledge to a further balcony. Spend some considerable time looking at all options but no useable natural belays. Drop 5m down left hand-wall & attempt to place a bolt but too soft being completely made up of soft moon-milk. Very pretty to look at, wonderfully reflective but crap for belaying.

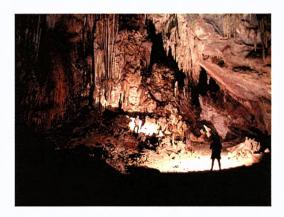
Eventually give up trying to hammer through to rock & ascend to the big ledge. Only solid rock is on the right-hand wall, tension traverse to stance & start to bolt. Halfway through, dripping with sweat & suffering from heat exhaustion, shout up to ask Snablet if he wants to give a hand? Comes straight down, finishes off my crap bolt & puts in a far better 2nd in double-quick

time. Figure rope will reach but needs further bolt re-belay or deviation to be safe. Also wonder just how deep & fast the water is as no sign of dry land & more worryingly we can see, &, hear waves flowing along a magnificent canyon passage.

Down from the bolts & great relief as I spy a thread in the opposite wall. Snablet slides down a tape & I eventually manage to tie it one-handed making a great deviation & superb free-hanging pitch. Taking it steady down to the water, to my relief this fortuitously proves to be only kneedeep. As it later turns out, any other landing site would have been in swimming water as this was to be the only shallow section in the whole river passage.

Whoops of joy as the others descend, the pitch being measured at 37m. Decide to explore upstream as this has the most potential & should make for the easier return trip.

Away from the rope the water deepens & rushes towards us through a narrow 1m wide canyon. We survey along clinging to walls, occasionally being swept off and tumbled back downstream. 80m on and the passage widens to 5m reducing the current & making it possible to swim along without having to cling on for grim death. This is great, dramatic, caving. The roof soars out of sight as we paddle along before the passage enters a chamber where we can take a break from swimming by clinging to stals coming down from a now, much lower, roof. More leisurely swimming/surveying before we call it a day at a distinctive formation having surveyed just over 1k



The return is a lot quicker as we are swept downstream. Woody and I go to have a look at the continuing downstream whilst Andy and Snablet ascend the pitch. The water agains deepens as we are carried round a couple of lazy 'S' bends before the passage widens into a mud walled chamber, all the water unbelievably disappearing into a rift plug-hole. Getting too near provides a scary moment as the current takes my legs from under me before managing to jam against the walls & roll to one side. That appears to be the end of the downstream passage but still needs a thorough look on our return trip.

Struggling back upstream, we ascend the rope, leave our wet-suits & life jackets at the balcony head, change into Ron Hills & thermal tops before heading for the surface.

Same team

This time our driver arranges for a local & his horse to meet us at the bottom of the climb up to the cave entrance at 4pm as it looks probable we will be de-rigging today.

Quickly to the head of the balcony pitch where we carefully check our drying wetsuits for any uninvited, overnight squatters.

First we complete the downstream survey leg & explore round the broken final chamber before swimming back to the rope & heading towards our furthest upstream point. The narrow canyon at the bottom of the pitch proves entertaining with one of my kneepads being flushed off on the way in!

We survey on. More gloomy swimming as the passage narrows until, about 150m on, the cave nips in at a calcite boss to what at first believe to be a final conclusion. Closer examination, however, reveals whilst the rift air-space closes in to 6", through this narrowing the passage can be seen to widen about 11/2m ahead, a howling draft is coming towards us &, underwater, the passage feels a lot bigger. Passing back my lifejacket & glasses, Andy holds my helmet through the narrow rift to light up the passage beyond while Woody holds the end of the tape slings. A few shallow breaths then, pushing down, I gingerly feel my way down & under the calcite boss before ascending the other side. Reaching back for my glasses, light, buoyancy aid, the "wet cave kit" is re-assembled & I swim ahead. 20m on; the passage continues to widen & the roof turns back into a high rift.

Back at the squeeze, the news that the cave is ongoing is not exactly met with unbridled joy. Andy ties off our last remaining rope at his side & passes me the other end to belay my side before coming through quickly followed by Woody. Things become a little crowded as this point the passage is only the same width and height as the 'narrows' in Dowerbergill but with a floor of bottomless water. Woody shouts that Snablet is coming through the squeeze rather than the sump.

Looking back he appears to have managed it with ease when he stops. "I'm stuck". It's abundantly clear that this is not simply a "stuck" but a genuine, 100% stuck.

The usual giving him something to pull/push on does absolutely nothing. The squeeze is a very narrow, tapering rift with a knob of calcite at knee level. Snablet has come in sideways, got all but his lower legs round the slight corner & then dropped ever so slightly downwards. Reversing proves impossible because of his inability to raise his body means the knob of calcite pushes into his knee & coming forward is equally impossible because his lower legs simply will not bend round the slight corner. We know this because he tries, he tries really hard until the pain proves too much. Anyone knowing Snablet will appreciate how hard a caver he is & that when he has a go at something, it's a damn good go. He remains jammed solid.

Matters become quickly very serious. Woody dives back through the sump to help and with him at on side undoing his ankle zips and me at the other undoing cuffs and collar, slowly, inch by inch, Snablet's 3mm steamer wetsuit is peeled off. Coming forward still proves impossible but, and with much painful effort, a bruised and scraped Snablet now manages to raise his hips and reverse. Looking at the rift again, it's amazing that he managed to get through as he did.

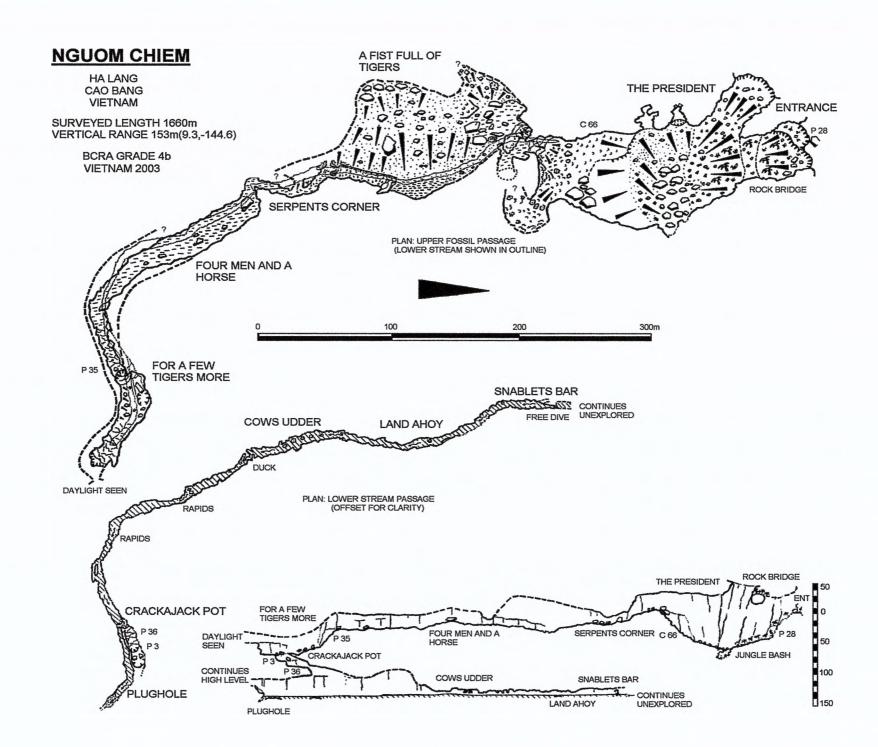
Unfortunately, in the ensuing struggle Snablet's helmet and ion lamp had disappeared into the depths below. The bottom can't be seen or felt and the walls are greatly undercut. It is time to call it a day and get out. The final act is to retrieve the can of Halida from the tackle bag and have a swig of nicely chilled beer whilst kicking water at "Snablet's Bar".

De-tackling went smoothly albeit the gear quickly piled up. Eventually we arrived at the bottom of the hill at about 4:45pm to be met by a patiently waiting guide with horse.

So that was the end of Nguom Chiem for 2003, the cave is still going (although there are differing views as to it's further potential) and it is certainly one of the few caves that the locals have not so far trodden. The daylight route needs to be pursued and there is open streamway beyond Snablets Bar. A superb sporting cave, great caving with a great bunch.



Sweeney



THE NGUOM SAP SYSTEM

The Nguom Sap system has now been explored for a total 13.7k. the system comprises 8 separate caves: Nguom Sap 5.4k; Nguom Lung Sam 2.7k; Nguom Cac Hao 1.0k,Hang En 208m,Nguom Nua 669m, Nguom Tu 419m, Nguom Cang 2.7k,Nguom Van 832m.

Exploration of the system began in 1997 with Nguom Sap. This is the highest sink, formed at the start of the limestone. Nguom Sap was surveyed for 2.2K in 1997 and extended in 1999 to 5.4K, with an exit in the Lung Sam valley. The stream is lost just inside the entrance, and can only be followed briefly before sumping. The majority of the cave is flood overflow or dry high level and is extremely well decorated.



After the conclusion of Nguom Sap the team crossed the col into the next valley and were able to explore Nguom Lung Sam. In this cave the river can be followed for the majority of the 2.7K, although there is some high level development. The cave ends in a sump, but there is an exit 2-300m before, known to the locals as Nguom Nuoc.

The team did not return to Ha Lang district until 2003, when the continuation of this system was one of the main objectives. This was made easier as a road was being constructed to the valley of Lung Sum. The local villagers were happy to show us several entrances in their enclosed valley.

Heading upstream, we were first shown a high level dry cave known as Cac Hao. This cave is extremely well decorated, and so far has suffered little damage. Ending in a calcite choke, there was no obvious way on, although the draught remained. A short remnant of enormous cave called Hang En was traversed. Dropping down into the valley beyond brought us to the other entrance to Nguom Lung Sam. Finally we explored the main resurgence, which is the continuation of Lung Sam beyond the sump reached in 1999. A fine section of stream cave, which ended in a large terminal sump after 750m.

Heading downstream led to the sink named Nguom Tu. Although only 419m long, the cave was full of deep water and could only be negotiated by swimming or inflated inner tube.

We emerged into another enclosed valley, with a small hamlet called Lung Cung. Initially very wary the locals soon became friendly after a discussion with Mau, our Vietnamese caver. They told us there was no cave where the main stream sank, and although we did not get a chance to confirm this we presume they meant no accessible entrance. Instead they showed us the flood overflow sink called Nguom Cang. Although the entrance did not look too inviting (large boulders, log jams and mud everywhere), the icy draught could be felt some 20m away. Surveying over the boulders we soon reached the start of what was to be a very cold section of exploration. Nguom Cang was surveyed for 2.7k mostly by swimming. It was well decorated in places with large gour dams. Lower down, probably in a very large pool the main water enters the cave. Several hundred metres later the cave exits into another enclosed valley.

Due to the cold nature of this cave, an overland route was sought and found to this valley. The stream flows across the valley for about half a kilometre before sinking again in Nguom Van. After only a couple of hundred metres, with lots of swimming the passage deteriorates into a series of rifts and cross-joints, worn into very sharp edges. A 10m climb up led into a very large chamber or passage.

At the other side of the chamber is a pitch leading undoubtedly back to the stream. A high entrance to this chamber is more or less on the boundary with China. The end of the expedition prevented any further exploration. Some dry entrances in the Lung Sum valley also remain unchecked.

Deb Limbert

NGUOM TU (Death cave)

This was the first cave that the two Vietnam virgins Watto and myself explored and we were certainly not let down by our introduction. We had spotted the cave on the map, it lay in a depression several hundred metres away from the village of Lung Sum. The walk in alone was more than we could dream of. Passing through pristine limestone never touched by the hands of man, the climbing potential of Vietnam I feel, is as exciting as the caving potential. The endless amount of new route potential never ceased to amaze me, much to the team's amusement.

Back to the caving however, a small path runs from the village of Lung Sum down stream through numerous paddy fields to an obvious entrance visible at the head of the valley. On Arrival at the entrance we were all suitably impressed, myself more I'm sure. This foreign lark was all a new game to me and much different to my usual dales grot hole projects. Although I love them all just as much, this was heaven to me, and the excitement of walking into 30 m high virgin passages for as far as you could see is enough for a boy of my standing.



We prepared surveying gear and pushed on down wading and swimming for a hundred metres or so. A large stream passage 30m high by 10m wide interspersed with ledges was followed. We passed an enormous sweeping corner where the roof rose to about 60m high and the passage was now 20m wide. This was truly amazing! We pushed on swimming another hundred metres until daylight could be seen. This was the first time human kind had heard Watto whisper. Yes it is possible. For all you cynics, all you have to do is tell him you are near China, for some reason this has adverse affects on his vocal

cords. We left the cave on the first day after surveying 450 m with a return imminent, as a continuation was inevitable. But first a check on the map to make sure that China was at least at arms length. This cave was entered many times after wards as it proved to be the only through way to the continuation of the system and the cave of Nguom Cang. It proved to be a fantastic intro to the caving of Vietnam. Fun was had throughout even when nearly killing our translator Mr Moa due to the cold and inadequate clothing, sorry Mr Moa!

HANG EN

This cave lays approximately two hundred metres from the Cac Hao entrance and was visible from several hundred metres away. After a day exploring Cac Hao Deb, Watto, Howard and myself went to explore this monster entrance. On first sight it appeared to be a certain winner. However as we closed in it became apparent that daylight could be seen at the other end of the cave. Although disappointing this giant entrance 50 metres high and 80 metres wide didn't go, the vast size of the trunk passage it had bored through the tower karst was impressive in its own right.

The total length was only a couple of hundred metres long but in parts it reached nearly that in width, this was enhanced by the fact that you could see everything because of the daylight shining through. Obviously its not very often you get too see a passage of this magnitude in such detail. We were all suitably impressed. Not half as impressed as I was at Howard's pencil finding skills in boulder ruckles, which Watto had so carefully lost for him, surely this wasn't the only pencil you may say! Deb and myself carried on through the cave to try and find a continuation, this was not to be however. We dropped down into a huge depression 300 m further away through some entertaining jungle and found another entrance. This was not the continuation of Hang En but a series of shafts dropped down possibly one hundred metres to what we believe to be the main stream way of a cave pushed in 1999 by martin Holroyd Mick Numwick and Howard Limbert, named Nguom Lung Sum.

CAC HAO

The second day of exploration for the two Vietnam virgins caving with veterans Howard and Deb proved just as productive as the first. This cave lay on the flanks of the village Lung Sum in a completely enclosed doline in an idyllic setting looking out over some of the most stunning tower karst experienced on the trip.

The previous day we had met one of the villagers who showed us the whereabouts of death cave 'a cave in the same valley.' And today he was to abandon his post on the road working / rice wine drinking team to act as our guide for a much larger more attractive pay packet than his mere rock breaking packet. Plus the added advantage of Howard's western fags and sweets. The day before he had told us stories of large dry passage with a good draft and we were certainly not about to be let down.

We arrived at the cave after a bone shaking journey with Mr Neu / Mr Shooey Shumacher. As we entered the doline another cave came into view with a huge entrance. Obviously this was assumed to be the one. As the pace quickened towards this monster our guide shouted to us to come back and pointed towards a dense patch of jungle and disappeared. Baffled by this behaviour we thought we had better respect his judgement and follow him.

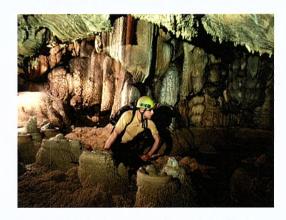
We stopped in a small clearing and re grouped and met a woodman with some teak style wood that was unbelievably heavy. Much to the amusement of us all Watto nearly gave himself a hernia trying to lift this wood the ever so slight woodman had probably carried tens of kilometres.

Our guide again disappeared into the jungle and hacked a path to the entrance of our cave. On arrival we were certainly not let down, a good draft issued from the caves depths and a large chamber 50m by 50m could be seen from the entrance.

We sat and organised our huge pile of gadgets and gizmos prepared survey books packed enough power bars and water to last us a day or two, then set upon surveying this beautiful new cave. (The local villagers had only found this cave in the last year and it was believed to have been entered in the past only as a source of water).

We set off down the entrance series which took us down a large ramp at 45 degrees to a chamber floor with stal covering every wall. A ramp led up from the chamber floor to a higher level in a large passage 25m by 25m. At the top of the ramp another level could be seen in the roof but beneath our feet a large rift vanished into the distance. Watto pushed on down to the bottom of the rift via a precarious climb down a bamboo pole far too weak for the mighty silver back Watto, but amazingly it held. When he reached the rift floor an impressive 30 metres down, the shouting from the hardy Yorkshire man suggested a going cave.

Myself Howard and Deb followed down the climb surveying as we went, to be greeted with a beautiful piece of passage covered in formations resembling something more akin to the new star wars film. We pushed along a rift 20m high to a small hole draughting strongly. Watto disappeared through this and the foul language happened again Howard and Deb disappeared as well leaving me trying to perfect the art of drawing as quickly as possible in order to see what else this wonderful cave had in store.



The next passage was more beautiful still, a perfect tube 10m by 5m for 50 metres continued onwards. The floor was made up of extinct gours golden in colour with an amazing coral appearance, to a draughting hole just person size. Again watto disappeared followed shortly by Howard and Deb. And my speedy drawing technique was starting to develop. However this time no cry of the silver back was heard yet this time the Vietnam veterans Howard and Deb could be heard laughing. Followed by Watto in his quietest voice saying 'wait till the youth sees this collapse' We pushed through the hole realising we had intersected a massive trunk passage. This passage was untrue, Watto was

right I nearly did collapse, it was a massive 60m by 50m for as far as your light would shine with columns from floor to sealing and cave pearls like gravel covering the floor some the size of tennis balls some the size of peas this place was heaven. After composing myself we pushed on down the passage past an enormous bomb crater looking hole 30 meters wide and 10 metres deep in the floor.

Myself Howard and Deb caught up on some surveying at the rim of this big hole while Watto vanished off in the passage, he came back telling tales of 100ft pitches but this enormous passage was still continuing so we pushed on with a return to Wattos pitch imminent. The main bulk of this monster passage went on for a further 200 meters climbing over monster boulders that had fallen from the roof until the roof started to come down and the floor started to go down an enormous ramp of boulders and clay at 45 degrees to the horizontal. Another huge passage led us round to the left up a climb on some excellent flow stone ramps and yet again we were not let down by this ever increasing classic Vietnam fossil cave.



We were now in a large branch of the main passage only slightly smaller than the main trunk passage, again this was beautifully decorated with large columns and fantastic flow formations in the most dramatic grey limestone I had ever seen. This passage continued for a couple of hundred metres until it hit a blind end. There seemed to be an obvious way on down a large pitch in the floor but the required tackle had not been brought. So Deb and Howard scoured some higher-level leads up some large climbs up flow stone ramps however they were not to be. Being the youngest most disposable member of the group of intrepid explorers it was my time to push some of these flow climbs desperate for the cave to keep going in the way it already had

.Several climbs into black voids were attempted none of them giving in to my many miss spent hours of climbing technique developed in the dales. Yet still as graceful as an ox. One last climb was made over the top of the large pitch over some horrible falls floors consisting of boulders glued together with calcite and clay. But still no imminent glory as the climb was not much better than the false floor below, the passage did still appear to go however but without a bolting kit it would have meant certain death.

Feeling quite let down that the cave had not continued to China we sat and gorged on power bars and Watto's secret supply of western sweets. We then set off back out of the cave in search of a higher level our guide had spoken of. We scoured the cave in search of the illusive passage and took several photos of our monster passage. We then decided our guide must have been on the rice wine and the high level must surely not exist!

After photos were taken we returned to the entrance with Mr Mau to ask our guide whether he was sure there was a high level in this cave or whether he was surely confused as Mr Mau's employees these famous British speleologist s surely couldn't be wrong.

Our guide then kindly offered to show us the where about of this high level. And produced the most primitive caving lamp known to man botched out of several yards of insulation tape a short length of electrical wire a large style lead acid cell and a hand held aluminium torch with a lens made out of thin polythene bag material to protect his match brightness bulb. He shot off down the cave with his barely adequate light and took us into the start of the large trunk passage and pointed up in the roof. Sure as watto is tone deaf there was a large passage above with a semi obvious climb up to it. Several comments were made about how gormless we had all been and then we set off up this long fantastic climb. Had it been in the lake district it would have swarmed with bank holiday climbers with their 100 classic climb's book. The climb ascended up to the roof for about 25 metres up a fantastic slab interspersed with gour pools to provide the required holds for its assent. This passage continued in a large phreatic well-decorated manner for several hundred metres over the top of the entrance passage until it ended at a complete choke of clay and boulders.

We set off out of the cave in search of the next cave the guide had told us of. This happened to be the entrance we had seen on arriving at the Cac Hao doline. Hopefully it would prove to be as fruitful as my introduction to the caves of Vietnam had been. The Vietnam veterans Howard and Deb were both also as suitably impressed by this fantastic cave as Watto and myself and we all left with a great sense of satisfaction.

NGUOM NUA

The two Vietnam virgins on the team, Ian 'Watto' Watson and myself carried out the first exploration of this cave. After a productive day at Cac Hao the entrance was spotted, a large resurgence with a 5m wide river issuing from its enticing mouth.

Both the 'Cream of British" caving and myself were both incredibly hot after walking in this unfamiliar hot climate. Howard and Deb offered the opportunity of probing this resurgence for a quich recce in the short time available.

The entrance itself has a wide 30-metre dam at its resurgence with a small beach leading down to its watery entrance. The mouth of the cave at this point is aprox 20m by 25m. Ian and myself were granted 30 minutes initial inspection of the cave. Being the younger of the two human probes I was pushed in first by the elder of the team to inspect the way on. The passage gradually increased with a lovely echo and a good draught. We swam up the passage for a further 200m until we hit a walking / wading section. Knowing that we had only limited time a fast fell race approach was needed to bag as much passage as possible before returning to base. I started running down the passage much to the amusement of 'Watto' trying to keep up. Had it not been for the size of Watto and his 'placid nature.' I would have continued running but, as it happened, I was too scared by his threats to throttle me if I didn't turn round. So we left the cave the first day at the "rock of ages" an impressive house size boulder in the middle of the stream way. With the way on still open and wide we returned to the entrance to tell of our caverns measureless to man and a cold beer at Snablets bar aka 'parasol pleasures.'

The next day we returned armed with surveying gear along with Mau, Deb and Howard. We promptly surveyed up to the rock of ages. Swimming all the way, another 50 metres took

us round an impressive sweeping corner and we ended in a large break down chamber with an obvious high level leading over a beautiful rock bridge 20 m above the stream way. A route was forged to the high level passage over a large boulder floor up onto a ledge. Here, much to the teams amusement as I delved into my ortlieb bag for some power bars, I discovered that for all my attempts with a roll of gafa tape while still in England, the botch job I had so beautifully done on my well used ortlieb bag, trying to save money in typical British student fashion had failed miserably, leaving me with one piss wet passport and several hundreds of thousand wet dong.



We left passport ledge and continued with an inlet entering immediately on the left hand wall 10 m high and 10m wide and draughting strongly. We erected a cairn and continued surveying.

We entered the next passage that rose up to the roof of the cave in a small 2m by 5m passage with lots of old stal decorating its interior; this petered out into a complete choke with no sign of a way on. We returned back to the cairn and surveyed the draughting passage which was very old with a cracked mud floor and the draft was found to be issuing from a choke high in the roof that was about as inviting as watto for the night. The total surveyed length ended at 669m. The mainstream up stream ended in a monstrous sump pool 40 m wide. Very inviting indeed.

Robbie Burke

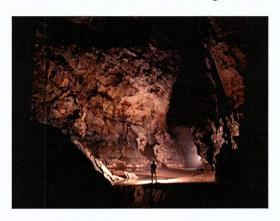
NGUOM LUONG VAN

After a long days walk by Howard and Robbie two caves had been earmarked. A visit to the area around the village of Lung Phua was organised. From here a 'pleasant' walk over a Col dropped us into a large enclosed valley. At the sink we felt at and saw at first hand the draught from the entrance with the inflation of a survival bag as seen on the digital camera from the recce trip. From here the team split into two groups, Watto, Snablet and Sweeny set off for the resurgence. Following Howard's instructions we trekked up the river to a point where Snablet did a John Smiths 'bomby', managing to keep the GPS dry. A little further on we were rewarded with a superb view of the resurgence entrance. Sweeny however was not impressed, "Ive been here before" he said as we approached, recognising the reeds and grass growing in the entrance. We were at the bottom end of Nguom

We retreated to the sink and set off after the others. A short length of boulder stream passage led down to a small climb into a large stream way, daylight could be seen upstream. Downstream swimming and wading in a huge tunnel we finally caught up with the others only to be told that the way on choked after a low airspace. Sweeny, Deb and Andy continued to look for a way on whilst Watto and Snablet pushed rifts chasing draughts only to be stopped by unstable boulders.

Returning to Howard and co we decided to bin it, so someone needed to tell the rest. "Watto go and tell them to bin it", they volunteered 'THE THINGS I DO FOR BRITISH CAVING'. Watto met Deb coming back through the low airspace duck to be told they had found a bit of a way on, we then exited the cave. Howard, Deb, Robbie and Snablet went to confirm that the resurgence was Nguom Cang. After a while Sweeny and Andy reappeared, announcing that they had found a very large passage or chamber with boulders half the size of houses. Woody and Watto were impressed, as the only thing Sweeny was taking any notice of was Kylie. We decided to have a look and to continue surveying. We decided that we were in a large chamber and that the best way was to survey around it, 'laugh!' it was very big. We eventually surveyed round to a type of head wall at the opposite side of the chamber, traversing along this we reached a passage. This turned out to be short, ending at a

pitch with the sound of a river at the bottom. As we had no gear it would have to wait. Returning to the chamber we continued traversing around.



A short distance further we entered another passage, this led to a small drop and looking up a small sliver of light could be seen, was this finally China! Time was against us so a retreat was made, we had fun in the chamber trying to locate the way out. We named the chamber 40k in recognition of the expedition total.

The following morning the team returned minus Andy who was suffering with the runs. Our aim today was to survey out to daylight, photo 40k chamber and look for other leads. Things don't always go as planned. After climbing down the small climb towards the light we entered a nice stal covered floor passage, unfortunately this ended a short distance further at a pitch down to a dry middle level. Over the top of the pitch was a steep ramp. Woody ascended this but was stopped by a very bold step around a buttress with a passage beyond to daylight but beyond our reach.

Back in 40k chamber Watto, alias David Bailey was trying to remember all the distances Andy and Howard had told him for using the large flash bulbs. Anyway, it seemed to work because when I shouted "flash" it looked very nice, so it's not that hard (P.S. I haven't seen the results yet)! After this the rest of the trip became very vague as I started suffering the effects of the heat and dehydration, thanks to Woody and Sweeny for the help getting me out.

Luang Van was a superb cave, 831.6m was surveyed with an undescended pitch. I think we will need a Chinese interpreter if that goes.

Watto

NGUOM CANG

This cave forms an important part of the Nguom Sap system. The previous section of cave, Nguom Tu (Death cave) resurges into an enclosed valley, which contains the village of Lung Cung. The local villagers were very surprised at our appearance in the usual brightly coloured wetsuits and caving kit. They informed us (via Mau our Vietnamese member) that the river from Nguom Tu did not enter another cave, but that the water went to China. As there is no surface river marked on the map and the valley is enclosed we can only presume that the water sinks, but there is no enterable cave. We did not have the opportunity to check this.

The villagers did inform us of a flood overflow cave in the valley called Nguom Cang and led us to the entrance. An obvious wet season sink, which looked as if it backed up in times of flood, Nguom Cang had a very strong cold draught, which could be, felt 30-40m away.

Surveying in over the muddy boulders and flood debris we soon reached a lake. This chest deep wade proved to be composed of half liquid mud and half freezing cold water (by Vietnam standards). After about 100m, a large mud bank was reached leading to a side passage. This dry passage led to another exit after about 100m. As both entrances were draughting out strongly it was obvious there was more to this cave.

More wading in mud and water led us to an area of collapse and flowstone. A large entrance (30mx30m) was seen entering on the left. The cave could be seen to continue with large gravel banks and small pools.

Returning the next day, we were disappointed to find that the large walking section was short-lived, and we were soon swimming in the cold water. The water temperature was about 15°C, which was too cold for 3mm wetsuits. The strong draught also meant that the brief moments out of the water were no warmer. About 1 K of cave was explored, mostly swimming. Two or three gour dams were encountered, where you had to swim to the dam, climb over it and drop down a couple of metres to the next swim. As it was the dry season, no surface water was entering the cave. These dams held back large sections of ponded water, which consequently

was much colder than the usual Vietnamese river cave.



Finally we emerged from a swim onto a gravel bank, and found 2-300m of dry gravel floored passage. After the previous kilometre of tall rift passage this section was very wide and lower-roofed. Passing some dried gour dams, we found the inevitable canal between flowstone banks.

Returning for the third trip into this cave we all wore life jackets, more for the hoped for insulation than buoyancy. Traversing the known section of cave we managed to keep reasonably warm, but once the surveying in cold swims began we soon cooled off.

The swims in the next part of cave, were generally shorter and interspersed with drier, muddy sections. After about 3-400m, we met an 8m climb down from the large dry passage into a 3m wide flowstone lined canal. More swimming followed in this well decorated passage. A short walking section led to a drop into a large lake. Sumped all around the left hand wall, this is possibly where the main stream enters the cave. The outflow from this pool is quite strong. The continuation although largely wading and walking was awkward due to underwater projections and sharp limestone flakes. Unlike the previous part of the cave there were several active sections with a fast flowing stream

The cave finally exited after a further 500m just above the valley floor. A limestone cliff could be seen opposite. After calculating the data, the exit was determined to be still just inside the Vietnamese border. The total length of Nguom Cang was 2,695m.

Deb Limbert

BAO LAC OVERVIEW

The district of Bao Lac is in the Northwest of Cao Bang Province. We were interested in a high limestone plateau around the village of Dong Mu. A French/Italian team had carried out a brief recce in 1995. Our Vietnamese friends warned us, that the area was poor and difficult to get to and around due to the lack of good roads. However we decided to finish the 2003 expedition with a look at the area. The drive from Cao Bang proved better than expected as work is progressing on the roads. We managed to obtain accommodation in the district town of Bao Lac, and sort out the necessary permits to explore the area.

Our main objectives were several sinks marked on the maps. Local people informed us that there was now vehicle access to Dong Mu, especially with the jeeps we were using. This made it easier for one team to set off and explore this high level area. The second team was to be based at Bao Lac and would investigate the sink at Ban Giem village.

The sink at Ban Giem proved to be a dry watercourse, with no obvious entrance. The locals were happy to take us to several short dry caves. One was 250m above the valley floor, in a limestone cliff, and was quite well decorated, but only 170m long.

An entrance at the side of the valley dropped down a 15m pitch into a dry canyon. Round a couple of bends, another 10m pitch dropped into a round chamber, with an unexpected inlet stream. Downstream sumped, and upstream a sharp rift bypassed a boulder choke to an active section of passage and finally a sump. The cave is below the valley floor. In the past the locals had thrown a couple of criminals down the entrance shaft, and various remains were seen.

The Dong Mu plateau was similarly disappointing, although a longer cave was found. The main sink marked on the map was choked. In spite of the lack of long cave systems, the area was well worth the visit. Populated largely by different minority groups, we were constantly surprised by the colour and variety of the costumes.

Deb Limbert

DONG MU

The trip to Dong Mu was to be a recognisance trip, we had looked at maps of the area and they showed what could be several sinks, the limestone in the area should be 900m deep so we could be in for a couple of deep caves! Well that was what we hoped for; unfortunately it didn't turn out quite the way we hoped.

We were staying at Boa Lac and from here you have a choice of ways to get to Dong Mu, you can either walk 20km up a big hill carrying all your gear (ropes, bivi gear, caving gear and food) or you can travel by Jeep! (56km on rough roads, which takes about 5 hours) We went for the Jeep option.

Once we arrived in the village we had to find the President, who when we found him was more than helpful, unfortunately the information he gave us was not what we wanted to hear! There are no caves in the area. We showed him the map and asked if we could go look at a sink, he said "yes, but there's nothing there!" a local man came with us to show us where it was, it turned out to be filled in, and the only consolation was that water does sink there in the wet season.



There was however a cave just outside the main village! Which we were shown to next, the locals had been clearing the hillside above it so we had a lot of brambles to move before a recce could be undertaken. Sweeney and Snablet obliged. After 20 minutes they surfaced, the prognosis was not inspiring.

More chats with locals and we found that we had looked in the only cave in the valley, which was a shame. Except there is one other cave just a short walk from the village, (this seems to be common in Vietnam, you ask if there are caves

and get a reply of no! or there is one, and when you push the point a bit they sort of tell you about others, why? I don't know, but that seems to be the way they do it) so we went to look. This new cave looked none too hopeful. It was resurgence but it needed looking at, so I was dispatched into the void to see where it went, (Sweeney, Snablet and Mau started surveying) after 60m or so I came to a sump.

We were now staying in Dong Mu for the night; as it was to late too drive back to Boa Lac so we went back to the first cave to survey that one.

A scramble down the entrance led into a short passage and a left turn to another passage leading to a stream. Downstream went for 60m to a sump, whilst upstream was large and open. Upstream was 20m wide and 5m high, we followed this passage around a few bends for 250m or so, until we came to a boulder collapse We spent a while trying to find a way through it, in the end we managed to find 3 ways through to the same point which looked like we might need wetsuits. I went for it only to find out you didn't! The passage continued for 200m until another boulder collapse, which was easily passed into a nice streamway, but time and lack of the right gear was against us, so we turned round and surfaced. At this point our problems started. It was dark outside and we didn't have a clue how to get back to the village, it took us bout 30mins to negotiate the paddy fields, without help from the locals we would have been there all night!!

After a nights sleep in luxury! (Village hall floor) we left Dong Mu and went to Loung Coa, which again, on paper, looked promising! Well, on arrival we asked and were told of a cave an hour's walk away. So we duly followed the local man and went to see.

Yep it was an hour's walk but what he didn't tell us was that it was uphill! About 340m vertically and a kilometre away. This put us at an altitude of about 1200m. Well there was a cave there; I went to recce it expecting to be heading downhill soon (how wrong was I).

From the entrance a short passage went left for 40m to daylight, right went 20m the to left into a large chamber (80m long 50m wide). At the bottom of this it hit a cross passage we turned left as it was BIG and looked good! This large passage continued for a couple of hundred metres until we came to a boulder choke that we

couldn't find a way through, the passage we had come down wasn't well decorated, just large (30m wide by over 10m high). We had seen a passage off to the left on the way in so we continued our exploration down this. It turned right then left into a phreatic tube at an angle of about 50 degrees down and was around 50m long, at the bottom of this tube was a large cross passage, we turned right and were rewarded with 50m of passage which had some fine decorations at the end of it but no easy way on! Left looked more promising as it was larger, a short scramble down and we were away, but only for 20m as we came to a short pitch, we didn't have any ladders or ropes with us so it remained undescended! Time, again, was against us so, we had to leave which was a shame, on the way out we looked at a short passage of the main passage; this only went for 30m into a chamber with no apparent way out.

Back to the surface, the mist had cleared and we got a fantastic view of the Loung Coa valley and the hill (mountain) we had climbed up! And were about to descend.



Back at the Jeeps our driver had chatted to locals and found resurgence for us, so we duly went with the man to look, it was a 60m rift to a sump, shame but there you go.

We left Loung Coa and on the way down we stopped several times to ask if there were any more caves in the area, each time getting the same answer, NO! We did, however, spot one at the side of the road, so with gear in hand, we ran excitedly across a field only to be disappointed as it was only 10m in length! With that, we set off back to Boa Lac and to report our findings to the rest of the group.

Woody

TEAM MEMBERS

Howard Limbert Deb Limbert Martin Holroyd Anette Becher Peter Macnab Paul Ibberson Gareth Sewall(Sweeney) Anthony Wood Ian Watson Chris Densham Robbie Burke Martin Colledge **Duncan Morrison** John Atkinson Danielle Gemenis Nguyen Quang My Phan Duy Nga Thuy Nguyen Ngoc Thach Bui Thi Le Hoan Le Thi Hong Hanh Nguyen Duc Mau Nguyen Van Phuc

Drivers

Nguyen Van Cu Nguyen Van Thang Nguyen Duc Nhieu Tram Xuan Lom



PHOTOGRAPHY

This expedition was the first to Vietnam to use both standard SLR and digital camera's. We also were very lucky due to the fact that we had an unusual large number of members who fancied doing underground photography.

We were also helped by 'megaflash' who gave a great deal on PF 200 and 300 bulbs. These we used along with AG3B bulbs for the 'smaller' passages. We used 'fireflash slaves' again kindly donated which were invaluable on the expedition.

All underground shots were taken on Kodak Extachrome 200 ASA and a wide variety of film was used for standard above ground shots. A number of digital camera's were taken on the trip and the results were excellent and probably the format for future expeditions.

MEDICAL EQUIPMENT

As usual the expedition took a very extensive medical kit to Vietnam. This comprised a variety of antibiotics, painkillers, dressings and creams. No major problems were encountered.

Betadine was used regularly to disinfect cuts and scratches. Antifungal creams and powders are also often useful. Antihistamine tablets were used occasionally for insect bites.

A few cases of diarrhoea were encountered, mostly short-lived. Rehydration solutions were useful, as well as Immodium. Ciprofloxin and Flagyl were included in the kit for any more serious cases.

Several people developed colds and flu-like illnesses, which also only lasted a short time. One person had a sliver of wood embedded in the calf, which was removed with the use of painkillers, and healed rapidly.

Splints of various sizes were taken but fortunately not required.

The expedition would like to thank Dr Angela Hare and Dr John Burton for putting together the kit, and Dr Danielle Gemenis for providing injectable painkillers.

ACKNOWLEDGEMENTS

Ghar Parau Foundation

Mount Everest Foundation.

David Hood

Power Bars-Richard Friend

Wayfarers meals.

Megaflash.

Keith Lewis

Inglesport

Ben Lyon

Firefly's

John Burton

Tony Seddon

Angela Hare

Vietnam 2003 Budget

Expenditure					
12 Members	6	Per Person		Total	
Flights		650		7800	
Insurance		60		720	
Airport Tax etc		10		120	
Visas	(40 UK + 15 Hanoi)	55		660	
Transport	Cao Bang Jeeps (\$400 Train Fares (10 x £25) Quang Binh Vehicle Hin		2750 250 250	3250	
Accommodation	Hanoi (3 nights * \$120 Cao Bang / Ha Giang (Quang Binh (\$3 pp p d	\$5 pp p day	250 1500 250	2000	2500 300
Salaries	(\$100 pw x 2 x 4 weeks Guides - Quang Binh	s)	500 200	700	
Hanoi University Setup Travel Expenses				200	
Equipment	Rope - 500m Tape Hangers/Maillons Carbide		500 100 Nil 100	Personal 700	
Underground Food	£3 x 24 plus misc			100	
Medical				100	
Photography				200	
Report				500	
Miscellaneous & Contingency				750	
				17800	
Income					
Members		1275	15300		
Grants received					
	Hood		500		
	MEF		750		
	120 11 12 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			12220	

750

17300

Sports Council/GPF

LONGEST CAVES OF VIETNAM

CAVE NAME	PROVINCE	LENGTH	YEAR	EXPLORATION
Hang Khe Rhy	Quang Binh	18,920	1997/1999	British
Hang Vom	Quang Binh	15,050	1992/1994	British
Hang Co Ban	Son La	8,500	1998	French/Italian
Hang Phong Nha	Quang Binh	7,729	1990/1992	British
Nguom Ban San	Lang Son	5,416	2001/2003	British
Nguom Sap	Cao Bang	5,379	1997/1999	British
Hang Toi	Quang Binh	5,258	1990/1992	British
Hang Duat	Quang Binh	3,927	1994	British
Hang Lanh	Quang Binh	3,753	2001	British
Ban Ngam	Cao Bang	3,600	1995	French/Italian
Hang Thung	Quang Binh	3,500	1994	British
Nguom Nam Lao	Cao Bang	3,360	2001	British
Ki Lu	Cao Bang	3,353	2003	British
Hang Ca-Be	Lang Son	3,342	1992	British
Nguom Pac Bo	Cao Bang	3,248	1997	British
Hang Over	Quang Binh	3,244	1997	British
Bo Luong	Lang Son	3,094	2003	British
Pac Lung	Cao Bang	3,109	2001	British
Hang Nuoc	Hoa Binh	3,075	2003	British
Bo Nhon	Lang Son	3,057	2003	British
Na Lon	Ha Son Binh	3,000	1990	British
Nguom A	Lang Son	2,970	2001	British
Ruc Mon	Quang Binh	2,863	1992	British
Ruc Caroong	Quang Binh	2,800	1992/1994	British
Hang Nguom Ngao	Cao Bang	2,575	1999/2001	British
Nguom Cang	Cao Bang	2,695	2003	British
Hang Tien	Quang Binh	2,481	1994	British
Ngoum Nam	Cao Bang	2,390	2001	British
Hang Ca.	Quang Binh	2,250	1994/2003	British
Hang Nuoc Nit	Quang Binh	2,205	2003	British
Nguom Kep 1	Cao Bang	2,200	1995	Italian
Nguom Sap	Cao Bang	2,100	1996	British
•		•		

DEEPEST CAVES OF VIETNAM VERTICAL RANGE

Basta Noodles	Ha Giang	-528	1996	Italian
Mu Cai Shaft	Cao Bang	-300	1995	Italian
Cam Thon	Cao Bang	-288	1999/2001	British
Ta Chinh	Son La	-184	1997	Belgian
Bang Ngam	Cao Bang	180	1995	French/Italian
Queens cave	Son La	-168	1993	Belgian
Hang Ong Trinh	Son La	-165	1994/1998	British/French/Italian
Ban Lay	Son La	-156	1995	Belgian
Nguom Chiem	Cao Bang	-153	2003	British
Nguom Ban Sien	Quang Binh	-146	1992/1994	British
Hang Khe Rhy	Quang Binh	-143	1997/1999	British
Nguom Ban Sien	Cao Bang	-128	2001	British
The Sequal	Ha Giang	-122	2001	British
Hang Lanh	Quang Binh	-114	2001	British
Nam Kep 1	Cao Bang	-110	1995	Italian
Lo La Phin	Ha Giang	-100	2001	British

Cave Name	District	Province	Length	Depth	Date
Quang Binh				00/21/200	
Hang Ho upstream/Hang Abo Noise Cave		Quang Bini	820.00 432.50	18.00 15.00	27/02/20
Noise Cave Hang Dong/Pitch Cave main	Bo Trach	Quang Bini Quang Bini			01/03/20
Whisky Cave	Bo Trach	Quang Bini			J JOI 20
Climb Cave	Bo Trach	Quang Binl	50.00	2.00	
Hang Troong	Bo Trach	Quang Binl		18.21	
Hang So Doi	Bo Trach	Quang Binl Quang Binl	1124.70 456.70	15.77 47.81	
Roadside Cave/So Dua Cao Hang So Dua	Bo Trach	Quang Bini		2.72	
Hang Va	Bo Trach	Quang Bini		7.76	
Hang Nuoc Nit	Bo Trach	Quang Binl	2204.90	53.21	
Shortcut Cave	Bo Trach	Quang Bini	90.00		
Kissing Frogs/Crispy	Bo Trach	Quang Bini Quang Bini	150.00 5.00		
Pond Cave Tree Root	Bo Trach Bo Trach	Quang Bini	10.00		
Subtotal Quang Binh	all the same		6258.70	213.48	
Hoa Binh				, , , , , , , , , , , , , , , , , , , ,	
Hang Nuoc	Yen Thuy	Hoa Binh	3075.00	11.59	06/03/20
DongThienTon	Yen Thuy	Hoa Binh	574.40	10.09	
Hang Dam Khenh	Van Son	Hoa Binh	80.10	22.51	
Hang Gio	Yen Thuy	Hoa Binh	452.70	14.49	
Hang Mu	Quy Hoa	Hoa Binh	66.40	5.67	07/03/2
Hang Lang	Hu Luong	Hoa Binh	110.00		07/03/2
Hang Muoi Hang Deng	Chi Dao Chi Dao	Hoa Binh Hoa Binh	129.20 281.10		07/03/20
Hang Deng Chua Vanh Cave	Yen Phu	Hoa Binh	70.00	13713571437	07/03/2
Hang But	Noc Lau	Hoa Binh	67.10		07/03/20
Hang Xop	Noc Lau	Hoa Binh	53.40		07/03/2
Hang Chua Khop	Trang Da	Hoa Binh	25.00		07/03/20
Hang Vanh	Yen Phu	Hoa Binh	128.00	X 100	07/03/20
Hang Resurgence	Yen Thuy	Hoa Binh	442.60		08/03/20
Hang Dong (Luon)	Lac Thuy	Hoa Binh Hoa Binh	1281.10 290.60	0.00	08/03/20
Hang Lan Subtotal Hoa Binh	Yen Thuy	noa Binn	7126.70		00/03/20
Jupotet rive Dittill			1120.70		
Lang Son					
Bo Nhon	Quoc Khanh		3057.30	54.49	11/03/20
Ban San	Quoc Khanh		3814.71		11/03/20
Coc Chi	Quoc Khanh		1361.88	20.73	11/03/26
Loung Xa	Quoc Khanh		464.90	14.68	12/03/20
Pac Bo Keo Chu	Chi Minh Chi Minh		4.00 30.00		13/03/20
Subtotal Lang Son	OH ITHIN		8732.79		TOTOSTZ
Cao Bang					
Hang Pec Dec	Thach An		577.00		14/03/20
Hang Water	Thach An Thach An		100.00 150.00		14/03/20
Hang Clint Hang Val	Thach An		533.70	S DOMESTIC	14/03/20
Hang Loung Bac	Phuc Hoa		214.00	60.90	14/03/20
Ki Lu	Phuc Hoa		3353.00		15/03/20
Bo Luong	Thach An		576.00	9.00	16/03/20
Ban Thoung	Phuc Hoa		3094.70	78.10	16/03/20
Ban Sao	Ha Lang		400.00		24/03/20
Hang Na Vy	Ha Lang		25.00		24/03/20
lang Doi	Ha Lang		50.00	450.00	24/03/20
Nguom Chiem	Ha Lang		1660.00		25/03/20
Cac hao Nguom nua	Ha Lang Ha Lang		1042.70 669.00	59.25	25/03/20
Nguom Cang	Ha Lang		2695.00	67.25	26/03/20
ung sum	Ha Lang		419.60	07.20	26/03/20
lang En	Ha Lang		208.10		26/03/20
Cuoc suoi	Ha Lang		107.90		28/03/20
(y sap	Ha Lang		752.10		28/03/20
Chuoi Hanh	Ha Lang		35.00		28/03/20
Ban Rac	Ha Lang		20.00		28/03/20
Cuoc suoi Sink Nguom Cao wet	Ha Lang Phuc Hoa		20.00		28/03/20
Viguom Cao Wet Viguom Cao Dry	Phuc Hoa		500.00		29/03/20
ung Sap	Phuc Hoa		282.60		30/03/20
lang Long	Thach An		80.00		30/03/20
Bivi Cave	Thach An	1000	10.00		30/03/20
o Keo	Phuc Hoa		160.00		31/03/20
Tac Cha	Phuc Hoa		60.00		31/03/20
Tu Dao	Phuc Hoa		10.00	20.50	31/03/20
Nguom Loung Van Ban Cac	Ha Lang Ha Lang		829.00	60.58	01/04/20
Dong Pheu	Ha Lang		80.60 700.00		02/04/20
Dong Pheu sink	Ha Lang		60.00		04/04/20
Ban Giem	Bao Lac		170.60		05/04/20
Roadside cave	Bao Lac		10.00	and the second	06/04/20
Iguom Lung Rac	Bao Lac		1087.70	85.67	
ung Rac Resurgence	Bao Lac		60.00		06/04/20
Du Bo Bo Chang	Bao Lac Bao Lac		60.00		06/04/20
to Glem	Bao Lac		773.00 200.00	40.00	06/04/20
iguom Nuoc	Bao Lac		219.10	40.00	07/04/20
lang Tone	Bao Lac		255.00		08/04/20
lang Puppy	Bao Lac		172.40		08/04/20
lang Bang Store	Bao Lac	Constant Sp	30.00		08/04/20
		Name of the Party	22712.80		22.4
Subtotal Cao Bang	THE PROPERTY	The second second	221 12.00		
Subtotal Cao Bang			227 12.00		