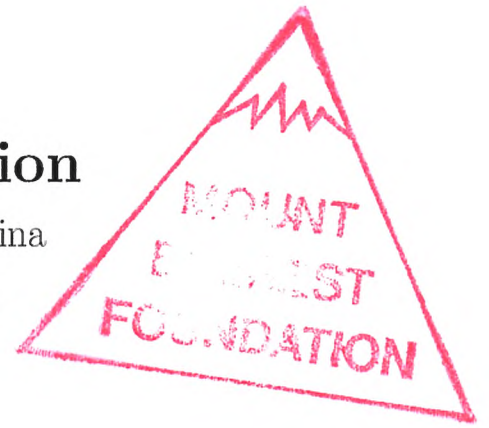


Haba Xue Shan Expedition

Cave expedition to Yunnan Province, China

24th August to 15th September 2013

Final Report



Edited by Gavin Lowe

1 Summary

The Haba Xue Shan Expedition took place from 24th August to 15th September, 2013. The aim was to search for caves on the south-east ridge of Haba Xue Shan in Yunnan Province, China. The mountain is 5396m high, and rises 3800m above the Jinsha Jiang (Yangtze River), giving the potential for an extremely deep cave.

The expedition found four caves, all of them quite small, and all fully explored. The rock in the area is very thinly bedded, making it rather shattered. Further, while it is clear that a lot of water is sinking underground, it is doing so spread across a large area, rather than concentrated in particular spots; as a result, the caves that have been formed soon become too narrow to be passable.

Most of our time was spent exploring a steep, narrow valley to the east of the main summit. The day after arriving at our base in the village of Haba, we recced a route in (helped by a small dog, which followed us up from the village). We decided to establish a camp at about 3700m, by an abandoned yak-herder's hut which we used for cooking and sheltering.

The following day we established camp. We had seen no running water above about 3000m, so we thought drinking water was going to be an issue, and so carried a very large volume of water up the hill. The next day it started to rain. It rarely stopped during the first fortnight. This solved the problem of water, thanks to a tarp, rigged to funnel the rain into a barrel. But it made for miserable prospecting. Further, we were nearly always in low cloud, meaning we couldn't see much of the mountain-side.



Establishing camp.

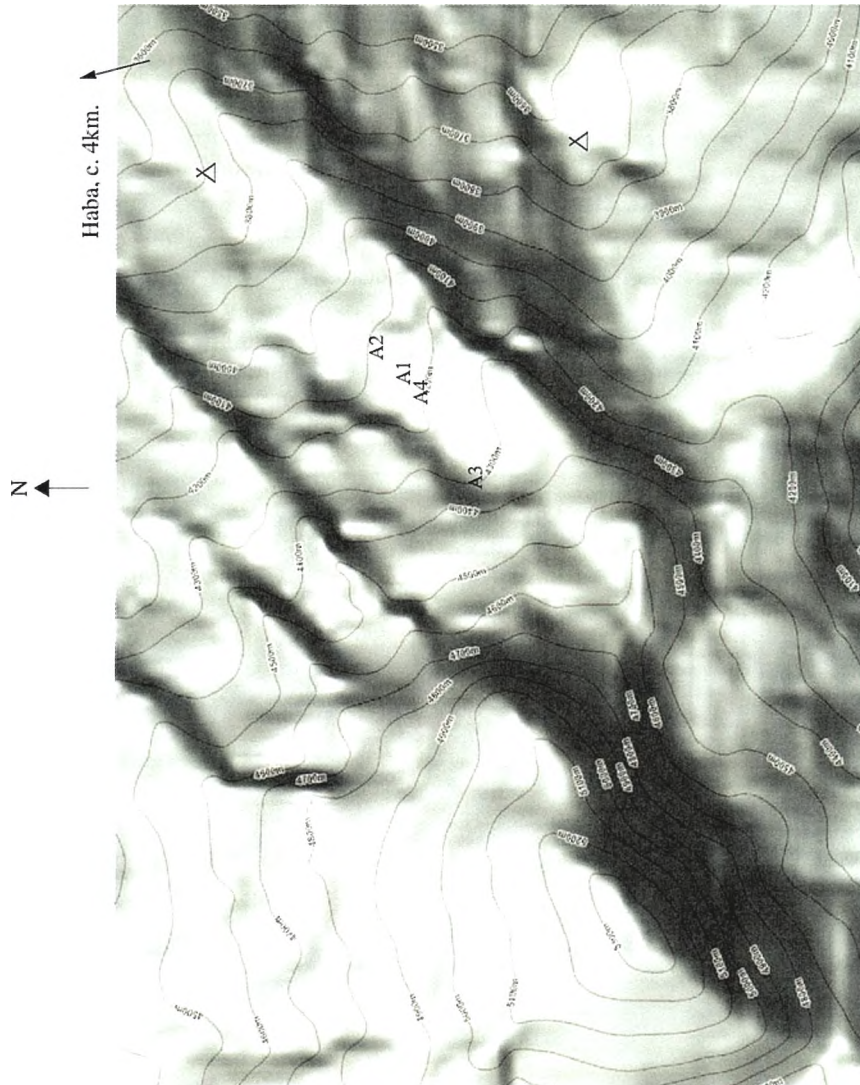


Figure 1: Map of the Expedition area, showing campsites and caves. (Source: Google Maps.)

Over the next week, we thoroughly explored the valley. The valley formed an amphitheatre, surrounded by steep jagged ridges.

The centre of the valley contained a steeply sloping ridge of very thinly-bedded, friable, quartz-laden limestone. Two caves were found in this, A1 and A4, but both became too tight at the bottom of the first pitch. Another cave, A2, was just below the bottom of this ridge; this cave was dug open to reach a chamber, but the continuation was too tight.



On the hill.

To the north-west of the valley was another subsidiary ridge, between two rivers (by now, in spate); however, this area was too shattered for caves.

The cave that seemed to hold the most promise, A3, was near the top of the main river. A subsidiary stream descended a calcified cliff, with some of the water dropping into the entrance of the cave. Over the course of two very wet trips this was descended, but 35m down it again became too tight.

A local yak-herder told us about a cave in the next valley to the north-west. However, we were unable to locate it.



Part of the south-east rim of the valley.

The most solid rock in the valley was along the ridge that forms the south-east rim of the valley; however, no caves were found here.

Towards the end of our time in this valley, some members of the expedition

managed to get up onto the ridge at the extreme south end of the valley. They were rewarded with a rare clear spell, and so were able to look down into the next valley to the south-east. This seemed, from a distance, to give more hope of finding caves. However, no passable direct route into this valley was found. We therefore dismantled camp, and carried the gear back to Haba.



A glacial lake near the ridge

Over the next two days, we recced a route into the valley, and then established a camp at about 3600m, again by an abandoned yak-herder's hut. The following day we explored up from the camp. Much of the valley was wooded, up to about 3900m. Higher up, the rock was again rather shattered. The weather was even worse than previously: continual heavy rain and mist. To make matters worse, on returning to camp we discovered that a cow had broken into the hut, and left the inevitable mess. We made a decision to pull the camp down off the hill, in order to get dry.

An excursion was made to explore a cave that we'd heard about, near the town of Sanba, 20km to the north of Haba. However, this cave closed down after about 35m.

A few days were left at the end of the Expedition to visit Tiger Leaping Gorge, and the towns of Shangri-la and Lijiang, before flying home.

It is disappointing that we didn't find more caves, but the rock seems unsuitable. The one area that might hold out some promise is higher up in the second valley, on the ridge itself.

Expedition members

NE	Nick Edwards	
KG	Kayleigh Gilkes	Expedition Treasurer
GL	Gavin Lowe	Expedition Leader
SMac	Steve Macnamara (Muh)	
SMc	Steve McCullagh (Bus)	
JR	Jock Read	
EW	Ed Whelan	

Acknowledgements We would like to thank the Mount Everest Foundation and the Ghar Parau Foundation for financial support. We would also like to thank our Field Agent, Liu Hong, and our Home Agent, Steve Roberts.

2 Expedition diary

24–25/8	All	Fly to Kunming.
25/8	All	Catch night bus to Shangri-li.
26/8	All	Arrive in Shangri-la. Catch bus to Haba.
27/8	All	Recce route into valley and porter gear.
28/8	NE, KG, GL, SMac, JR	Establish camp.
28/8	NE, KG, GL	Recce central slab; found A1 and A2.
28/8	SMac, JR	Recce ridge on south-east rim of valley.
29/8	NE, KG, GL, SMac, JR	Recce north ridge and upper centre of valley; found A3.
29/8	SMc, EW	Ascend to camp.
30/8	NE, SMc, JR	Descend A3 for 8m, and enlarge continuation.
30/8	NE, SMac, SMc	Fully explore A1.
30/8	KG, SMac	Recce south-east rim of valley and lower cen- tral slab.
30/8	GL, EW	Recce north ridge, making sketch map; recce central slabs.

31/8	SMac, SMc, JR	Recce next valley to north.
31/8	All	Descend to Haba.
1/9	All	Ascend to camp.
2/9	GL, SMac, SMc, JR	Recce south-east side of valley and top of valley.
2/9	SMac, SMc, JR	Recce up to ridge.
2/9	NE, KG	Recce north side of valley, and up to ridge
2/9	NE, KG, SMac, SMc	Dig and fully explore A2.
3/9	SMac, JR, EW	Fully explore A3. Discover and fully explore A4.
3/9	NE, GL	Attempt to find a route into the valley to the south-east, without success.
4/9	All	Dismantle camp and carry down to Haba.
5/9	GL, SMc	Recce route into second valley, to the south-east.
6/9	All	Establish camp in second valley.
7/9	NE, KG, GL, SMac, SMc, JR	Recce in second valley, without finding any caves. Dismantle camp and return to Haba.
8/9	NE, SMac, JR	Explore cave near Sanba.
8/9	KG, SMc	Trip to Shangri-la for cash.
8/9	GL, EW	Attempt to reach cave near Haba, without success.
9-10/9	NE, KG, SMac, SMc, JR, EW	Tiger Leaping Gorge.
9-10/9	GL	Shangri-la.
11-12/9	All	Lijiang.
13/9	All	Travel to Kunming.
14-15/9	All	Fly home from Kunming.

3 Caves explored

⊗ A1

Location: Part way up the slab in the middle of the valley, above a prominent mushroom-shaped rock formation. N27.33016°, E100.12890°, alt. 4173m.

Description: Shaft descends about 15m in fairly wide rift, landing on pebble floor. Rift closes down in both directions.



Looking down A1 (left). Nick Edwards emerging from A2 (right).

⊗ A2

Location: At base of slab, below wee gully, below A1. Small hole in ground.

Description: The hole was dug open to reach a 1m by 4m chamber, leading to a too-tight continuation.



Digging A2, with a view back down the valley.

⊗ A3

Location: High in the valley, near the main stream. A tributary stream descends a calcified cliff, and some of the water drops into the cave. N27.32700°, E100.12376°, alt. 4281m.

Description: The pitch descends 35m, initially quite tight, but more roomy lower down. At the bottom, there are only two possible digs. Note: the pitch is extremely wet, and probably often impassible.



Descending A3.

⊗ **A4**

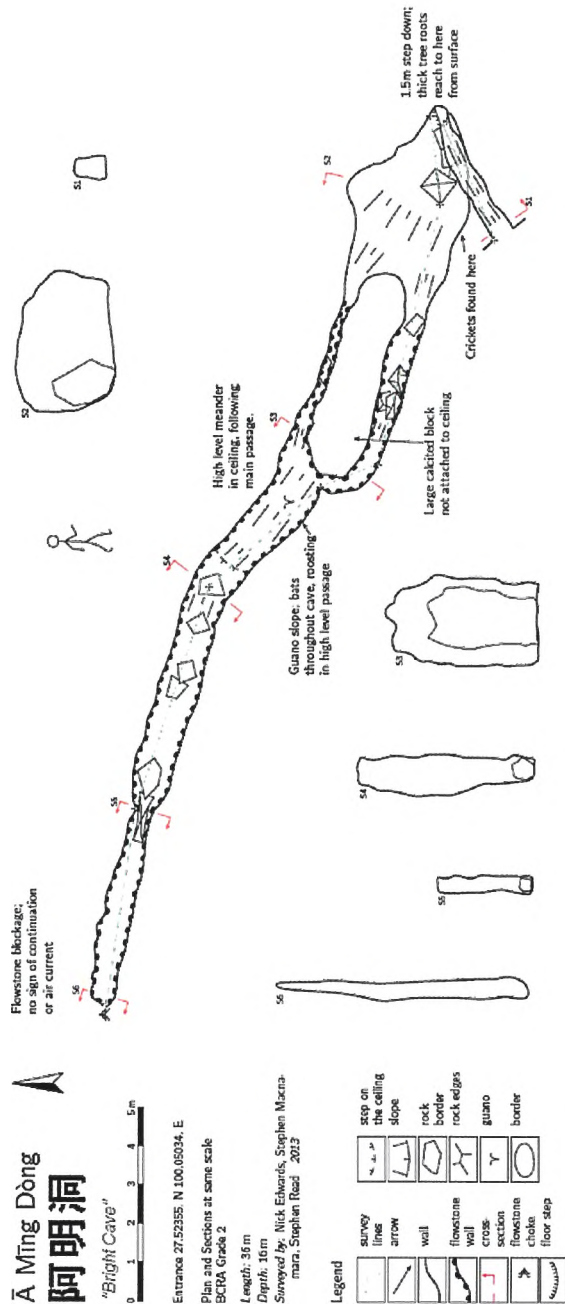
Location: Half way between A1 and the obvious rock arch.

Description: A 30m pitch leads to a floor. The rift at the bottom is too tight in both directions.

⊗ **Ā míng dòng**

Location: On a hillside to the east of the village of Sanba. A steep walk down to the river is followed by another steep climb up the opposite mountain along a muddy track. After one hour, an area of limestone pavement is reached. The small entrance is hidden amongst the many clumps of trees. Local village guides are available. N27.52355°, E100.05034.

Description: The entrance is filled with large tree roots, which continue for several metres into the cave. The entrance tube quickly arrives at a vertical slot into a chamber with a sloping mud floor. A large mound of calcited rock lies in the centre of the chamber, and passage is possible along the left side. From here onwards, all surfaces are heavily calcited. The floor continues to slope down guano piles to reach a narrowing rift with a rocky floor. The end is blocked with flowstone and has little potential. The cave is dry and warm, and is inhabited by numerous bats.



4 A speculative recce

‘Make sure you let them know it’s a somewhat speculative recce’.

‘I like prospecting expeditions’.

We had a team, who after a few minor visa glitches, were all on planes heading for China. By Sunday 25th August we were all assembled in Kunming (capital of Yunnan province) minus 1 bag which was having a separate journey around Amsterdam. Planes we were used to, next came the more unusual sleeper bus. Having boarded and managed to find our bunks in the jumble of numbers, why wouldn’t you just randomly number them? We tucked ourselves in and spent the next 14 hours sleeping, trying to avoid being bounced into the roof or perving on girls in red dresses. Slightly more rested, upon arrival in Shangri La, we had 2 hours in which to buy everything we might need to camp in the mountains: fuel, pots, pans, chopsticks, a massive orange tarp and a few drugs. Then we were back on a bus which wasn’t going as far as we wanted it too; luckily in China you seem to be able to pay the driver a bit more and he will take you to the place you want. For us this was Haba.



Loading the bus to Haba.

Haba is a small town below the slopes of Haba Snow Mountain (Haba Xue Shan) in northern Yunnan. Most of the time it’s a fairly sleepy town with lots of little shops, a few cafes and numerous pool tables. Haba Snow Mountain Guesthouse, at 120 Yuan a room, was our base. Market days, which seemed to be roughly once a week, brought many more people to the town and the guesthouse, with additional street stalls and people coming from the surrounding countryside to buy and sell their goods.

The guesthouse was our base in town, but we weren’t in China for a town holiday. We were here for mountains; or rather what we hoped might lie beneath them. There’s limestone here, a lot of it. Haba Xue Shan is 5396m high and rises 3500m above the waters of the Yangtze River flowing through Tiger leaping gorge. Our aim was to set up a camp high on the hill and explore up to the snow line, looking for entrances to a cave we hoped may resurge in the river at the base of the gorge.

Tuesday morning saw 7 people carrying things to set up camp and 1 small dog (who belonged at the hostel) puffing up the mountainside.

The road meandered slowly up from the town to a quarry on the hill via

numerous bends, amongst apple trees sporting rosy apples and maize ready for picking. We sweated through meadows scented with thyme, speckled with little flowers recognisable from rock gardens back home and buzzing



The walk in.

with the sound of enormous crickets. We slogged steadily up between trees dripping with tendrils of mint green lichens, crossed dry gulleys on bridges of logs left by illegal loggers and squeezed between fragrant pines before stumbling into a small clearing containing a run-down wooden hut. This hut and the surrounding area were to become our base camp, at an altitude of 3700m. The addition of our tarp soon gave it the name of “Orange Lodge”. Dropping bags, we scrambled on up a sandy slope out of the trees to finally meet our valley of limestone. ‘This looks like Voronja country’ (Steve Muh).

The following afternoon the search for water began; little did we know we soon wouldn’t need to worry. As we scrambled up through the trees into a small gulley we found a small pool in the stream bed that could be dug out to make a pool that would hold 40+ litres. Pool dug we headed on up the valley into an amphitheatre surrounded by knife-like ridges rising skywards and scrambled onto flaky quartz-laden slab, rock so friable you could crumble it to dust with the toe of your boot. On the flat top of the slab, invisible until right upon it, a crack 5m long and 1m wide was our first potential cave. Looking down the crack water worn curved rocks appeared promising and the pitch seemed at least 10m deep. This was to be A1. The flat areas of the slab were few and far between, mostly it was steep flakes. At the base of the same slab containing A1 was a small hole blowing a reasonable breeze, but too small and loose to enter without work. This became A2.

During the night the rain began. We awoke to thick clag, cooked our noodles and drank steaming cups of green tea. The mist was set in, so when we could put it of no longer, we set off up the ridge above camp, battling through rhododendrons dripping with water until we broke out of the trees onto the moraine. As we climbed higher and higher up the ridge we had to stop more and more often in order to catch a breath. Reaching the top of the ridge without finding caves or even likely areas for caves we headed towards more slab.

Clambering around slabs and down into a dry stream bed A3 was found. This cave took the majority of the water from the stream, when the stream

flowed. The exploration team were later to find out just how much water it took.

A1 was descended to a depth of 25m where it closed down in all directions.

A2 was dug big enough to enter and the loose rocks mostly cleared away. After a sloping descent of 2m it closed down to a too tight continuation.

A3 was descended to a false floor at 8m down and then after enlargement to 35m, where it became too small to continue. When it rained a waterfall poured down the entrance pitch and made exploration both miserable and potentially treacherous.

Day after day the clag stayed; sometimes it swirled around giving tantalising glimpses of mountains and cliffs, bamboo and rhododendron, or the grey of slab and moraine. The clearest views we got were when it rained.

In the clag the steep ridge to the east was scaled and traversed whilst looking for a way over into the next valley, only to discover dense forest and vertical cliffs barred the way. The 3 known potential caves were dropped and explored to no avail along with another cave, A4, found on the way back from A3, which also produced no results.

With the rock crumbling on the surface and the entrances closing down after very little time, we spread out and aimed for the main ridge below the summit. Trudging out of our lovely cosy hut in yet more clag, morale was low, but as the clag thinned and a lighter glow appeared through the thin clouds, smiles returned. By the time the sun broke through even the idea of dry clothes seemed feasible. Battling up to the base of the glacier we topped a small crest and a powder blue lake appeared. A stream entered at one end, but no stream left. The water was percolating down through the rocks; no hole and no cave.

Scrambling up the last steep, rock strewn slope gained the ridge below the summit buttress, but still no decent limestone. Peering over the edge a view of deep cut lush green gorges sprung into view. Water clearly formed the gorges but no waterfalls could be seen entering them. Might this be cave country? We couldn't hope to explore the area though as it would take too long to get to. Glancing across to the left, a meadow with small ponds dotted around it was sighted. This we could, perhaps, get to.

Back in the Orange Lodge with almost dry clothes, sightings were com-



Approaching the ridge

pared and discussed. Over the eastern ridge, a valley with potential had been seen, so after a few days of searching for ways into it and a brief sojourn back in Haba, we moved camp down the hill and across to the new valley.

Haba's cafés, pool rooms and even shop forecourts each have a few weathered old faces. In cafes serving bowls of steaming noodle soup topped with fine mince, lettuce and herbs, we watched and discussed asking about caves. We attempted to join in a game of mah-jong; it helps to know the rules though. Eventually in another café whilst sharing their locally harvested, almost earthy, fresh walnuts, we finally asked. The Chinese flowed, sketched maps were drawn and characters written down so we could find a guide in Sanba (the next village), home to Baishuitai, a large terrace of flowstone exposed on the hillside.

Sanba details carefully stored we ventured into valley two. The walk-in seemed less of a slog this time. More of it was level, contouring around the edge of ridges and gulleys most of the way, before climbing steeply up the valley itself. This time we passed inhabited huts, beehives carved from trees, and streams with water. Just as the walk was becoming a slog, we arrived at a tumble-down hut partially built around a tree. Scattered amongst the wet scrubby weeds were 3 small grassy patches, perfectly sized for our tents. The hut's timber walls sagged and bowed, its roof had more holes than a colander, and we were soaked. Clambering over a roof of rotting beams, collapsing under feet, the tarp was fixed in place and we were able to dry out.

Besides us, the area was home to a herd of cows. One particularly inquisitive black and white beast with spectacular horns didn't always understand personal space.

Another night of rain flooded tents and left a misty morning. Push-



The second camp

ing up through wooded gulleys lead to slabs and cliffs. Despite a few hollows and small cracks, caves remained elusive. Above these cliffs, up a gentle slope and over a rim was a green meadow, somehow familiar. The pools and streams sank into the meadow, sometimes you could see the sink-holes, but you would never fit into them. A lot of water was sinking. It had to be going somewhere, but we weren't to know

where. Nothing flowed from the meadow, either to our valley, or towards the gorges we knew were there but could barely make out through the rain.

Looking forward to our now cosy new hut, we slipped down a good but muddy path. Stumbling through the door, a scene of chaos greeted us. Seemingly the scent of vegetables and especially dried noodles had lured our inquisitive cows through the narrow entrance into our shelter, where they had wreaked havoc. Noodle crumbs scattered around an upturned table crowned with a parting gift of cow pat.



A visitor to the hut



The second valley

With no food, no leads, and no dry clothes we left the valley and returned to Haba, prospecting on this mountain over.

For our last day before departing Haba we headed separate ways.

Team cave went to Sanba, a friendly guide leading them to the entrance of the cave described by the old men back in Haba.

Crawling down into a small hole amongst tree roots found them in a cave with dirty old calcite formations and lots of bats. For about 35m the cave was promising, but like every other option it too closed down to nothing at the end of a rift.

Team Haba spent the day meticulously tying knots one after another until a mat of rope had been created. This mat, with a tail at each end, was later presented to our landlady on our departure for use as a swing seat.

Team cash had an exciting 10 hour round trip back to Shangri La as funds were running very low and the card machine at the guesthouse didn't trust dodgy British and Irish cards. On a minibus crowded with children returning to school after holidays at home in the mountains, we first toured Haba, collecting kids, live chickens in a cage to go on the roof, and bags of various foods before the cramped journey really began. Four hours later we were in Shangri La, depositing kids at schools, the chickens at a restaurant and us at a cash point. Or rather, depositing us on the opposite site of a

four lane road from the cash point. Taking our lives in our hands, and with our eyes shut, we dashed across the road, making it safely over and back with plenty of cash to last the rest of the trip. Following this, we stopped for a mountainous bowl of fried rice for lunch and a toilet break at the most disgusting toilet in China: squats inhabited by rat-tailed maggots, a gag inducing smell, and you had to pay! We then headed back, via lots of shops to gather goods for delivery in Haba and a box of chicks, arriving back at the guesthouse in time for yet more food.

Another wonderful meal of fried yak with chillies, pork with garlic, courgettes, potato gratin type thing, egg and tomato, and broccoli prepared by our hostess was our last dinner in Haba. With morale as damp as our boots we were going on holiday. Our speculative recce had found nothing significant.

Kayleigh Gilkes



Tiger Leaping Gorge



The market in Shangri La

5 Expedition accounts

All figures are in UK pounds.

Income

Grant income		
Mount Everest Foundation	1000	
Ghar Parau Foundation	250	
Subtotal		1250
Personal contributions		5498
TOTAL		<u>6748</u>

Expenditure

Expedition expenditure		
Gear	146	
Food, drinks, fuel	266	
Accommodation	548	
Local transport	117	
Guides, porters	12	
Misc.	19	
Subtotal		<u>1108</u>
Personal expenditure		
Travel to China	4600	
Insurance	470	
Visas	570	
Subtotal		<u>5640</u>
TOTAL		<u>6748</u>