

# **Northern Laos Christmas 2002**



**Expedition to  
Muang Ngoy & Luang Prabang  
Lao PDR**

**Report by  
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## Introduction

Laos is a small country and usually little is known about it. It is squeezed between the much bigger neighbours Thailand, Vietnam, Myanmar, Cambodia and China and only sparsely populated with just 5.5 Mio people. Mountains and plateau's of 1500-2500m height cover 70% of the country and it has one of the most untouched forests in the world. The mighty Mekong crosses the country from the upper north to the very south with many tributaries like the Nam Ou that serve as natural roads. Many travellers are impressed by the laid back atmosphere and the charm and easiness of the Lao people which gives you the feeling to be in a world of different values. This is in extreme contrast to the sad history of Laos to be the most heavily bombed country per capita in the world during the Vietnam war from 1964-1973. Many war remains are visible and UXO (unexploded ordnance) is a crucial heritage of this time. This and the communistic politics of isolation from the western world that followed after the war are the reason for the remoteness of the country. The collapse of the USSR pushed reforms and led to a more pragmatic way for the development of the almost on foreign aid dependent country. Seventy-eight percent of the national budget was in 1997 from external sources and the annual income US\$ 263 in 2001. The country rapidly opens up since some years and promotes tourism in the hope of a source for an additional income<sup>1</sup>.

Cave expeditions to Laos started in 1991 by the French caver and geologist Claude Mouret who lived in neighbouring Thailand. The main karst area is Khammouane with huge rivers crossing a maze of limestone mountains. The area offers still after almost every year expeditions and more than 100 km of surveyed caves a huge potential<sup>2</sup>.

Second area of interest is Vang Vieng<sup>3</sup> in central Laos with a magnificent karst scenery of rivers and towers. Little was done so far in the north of Laos except one expedition organized by dutch cavers<sup>4</sup> and small reeces<sup>5,6</sup>.

The purpose of this small scale expedition by the authors was to check the potential for caves around Muang Ngoy and Luang Prabang and to establish contacts for further full-scale expeditions. This goal was achieved and from 16.-30. December twentytwo easy accessible caves visited and 1.85 km mapped.

## The Nam Ou Valley around Muang Ngoy

Muang Ngoy ("Village of the small peninsula") is reached by a 3h bus ride from Luang Prabang to Nong Khiaw and a further 1h boat trip on the Nam Ou. The village is only accessible by river and is surrounded by 700m to 1500m high limestone mountains. The karst area is about 20 km long and 15 km wide. The Nam Ou valley cut through it from north to south and exposes a impressive scenery of steep limestone cliffs of up to 600m height covered with dense monsoon forest. The landscape changes quickly into lowland hills of sandstone underlaid with slate and few isolated karst towers. The caves can be divided into two types. First into classical active river caves close to the Nam Ou or Nam Ngoy. Examples for this are the Tham Doun and Tham Pawee. They are flooded during the rain season from July-October which is easy recognisable by mud covered walls up to the ceiling. At this time of the year the river level of the Nam Ou can rise as much as 8 m! The caves have usually one



Map of Laos with the marked areas of Thakek, Vang Vieng and Muang Ngoy.

main passage with a small active river or stream and few short side branches. Tham Pageo - the longest cave in the area – is more complex, but still has the scheme of a main active passage. It is connected via a siphon to Tham Kham where the stream exits the cave into the Nam Ngoy.

The second type of caves is found at the foot of the mountain cliffs and is typically located about 100m - 200m higher than the river. Tham Panoi and Tham Paho fall into this category. They have one fossil passage with many dripstones on the floor and ceiling.

The owner of the guesthouse where we stayed told us about more caves higher in the mountains. The huge height difference of up to 1400m from the top of the mountains to the valley indicates a good potential. The only question is how to reach the entrances in face of steep hills covered with thick almost impenetrable jungle!

### **Luang Prabang Area**

The second shorter part of the expedition focused on the area around Luang Prabang. The limestone mountains are easily recognised when descending by plane into Luang Prabang airport. Luang Prabang is with 20.000 inhabitants the second biggest city after the capital Vientiane. It was the centre of Laos in 1353 at this time called Lan Xang which means land of the million elephants under a white parasol. It has many historic temples from this time and is one of the tourist highlights in Southeast Asia.

A few caves were surveyed 6 km south of Luang Prabang at the river banks of the Mekong. These were the caves Tham Din and Tham Tatkeh which can be sorted into the scheme of fossil caves higher in the hills.

The following sections provide details about the caves with entrance photos, maps, impressions of the surrounding and some general information for caving in Laos.

<sup>1</sup>A short history of Laos, G. Evans, Silkworm Books, Chiang Mai 2002

<sup>2</sup>Le Karst du Khammouane au Laos Central, C. Mouret, Spelunca No 84, 2001

<sup>3</sup>La zone karstique de Vang Vieng, M Hedouin, L. Renouard, Spelunca No 77, 1999

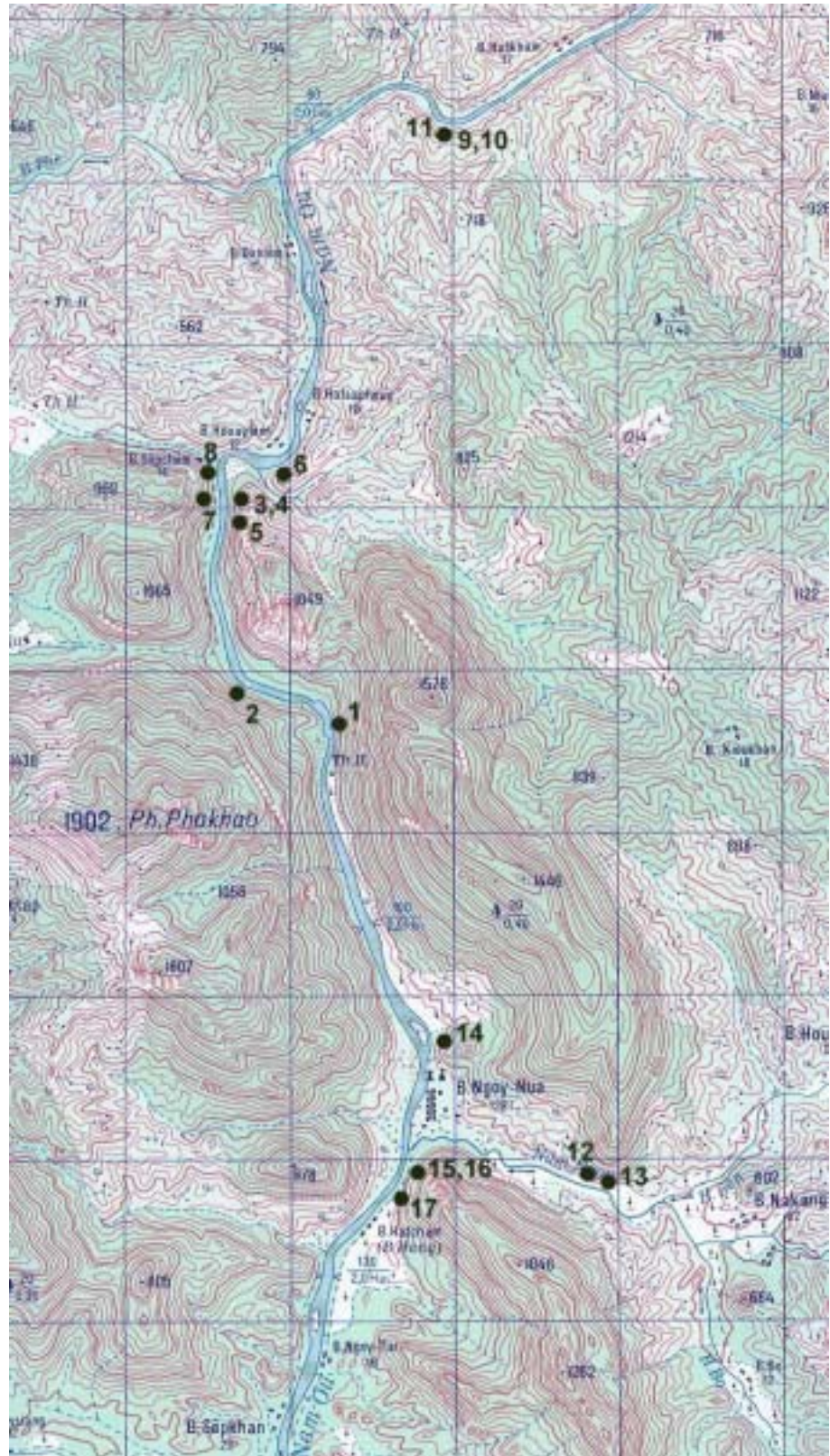
<sup>4</sup>verbal communication with D. Eskes, report from expedition in 2000 in preparation

<sup>5</sup>Reconnaissance dans le nord du Laos, L. Deharveng, A. Bedos, Spelunca No 79, 1999

<sup>6</sup>Catalogue of Caves in the Lao People's Democratic Republic, F. Brouquisse, International Caver 25, 1999

## Overview of caves around Muang Ngoy

1. Tham Pasang
2. Tham Doun
3. Tham Paho 1
4. Tham Paho 2
5. Tham Paho 3
6. Tham Hoengu
7. Tham Luang
8. Tham Paman
9. Tham Pawee - Upper
10. Tham Pawee – Lower
11. Tham Pachiau
12. Tham Kham
13. Tham Pageo
14. Tham Panoi
15. Tham Pafan 1
16. Tham Pafan 2
17. Tham Nam Ngoy Noi



Some Lao words for cavers:

Tham	Cave	Nam	River
Ban	Village	Muang	District Village

## Impressions of Muang Ngoy Valley



View from Muang Ngoy Village along the valley in northern direction. In front the building of the harbour master with passengers waiting for the departure of the daily morning boat. The river level raises during the rain season almost to the level of the hut.



Idyllic and relaxed atmosphere of Muang Ngoy. The only and main street runs parallel to the river with some shops, restaurants and guest houses.



The 650m high mountain south of Sop Tiem Village. The Paho caves are located at the base of the limestone cliff. They served for the whole village during the war as a hiding place for several years.



The middle of the valley close to Tham Doun.



Dramatic steep 400m high cliff with untouched dense monsoon forest close to Tham Pasang.



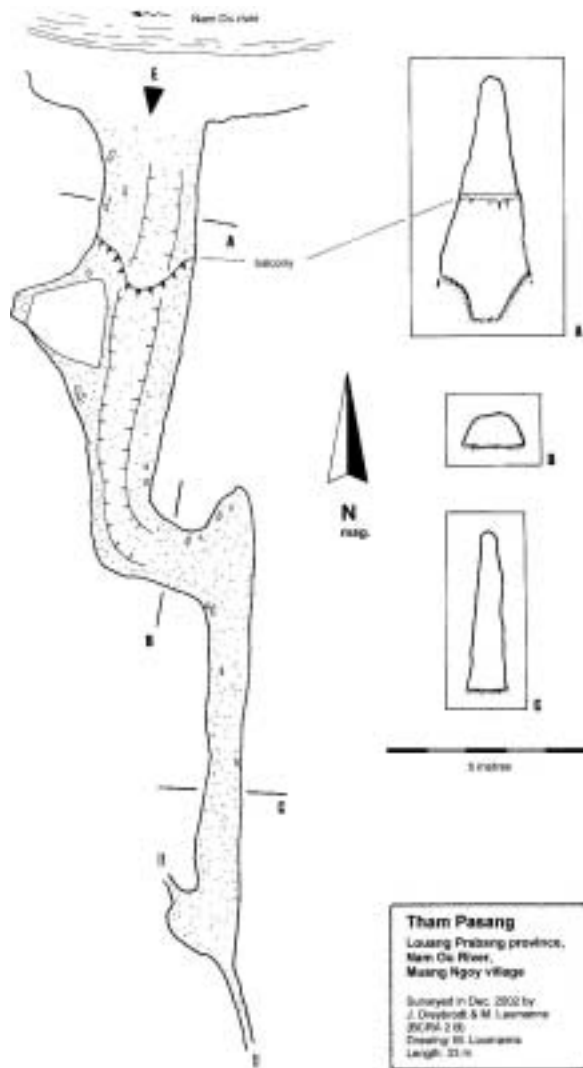
Corn fields with kettle in the plains of Nam Ngoy. The Tham Kham and Tham Pageo are located on the foot of the hill to the right.



View to the rugged karst mountains close to Tham Pawee. The landscape in the front is already dominated by shallow hills of sandstone.

## The caves of Muang Ngoy Valley

### Tham Pasang (Elephant cave)



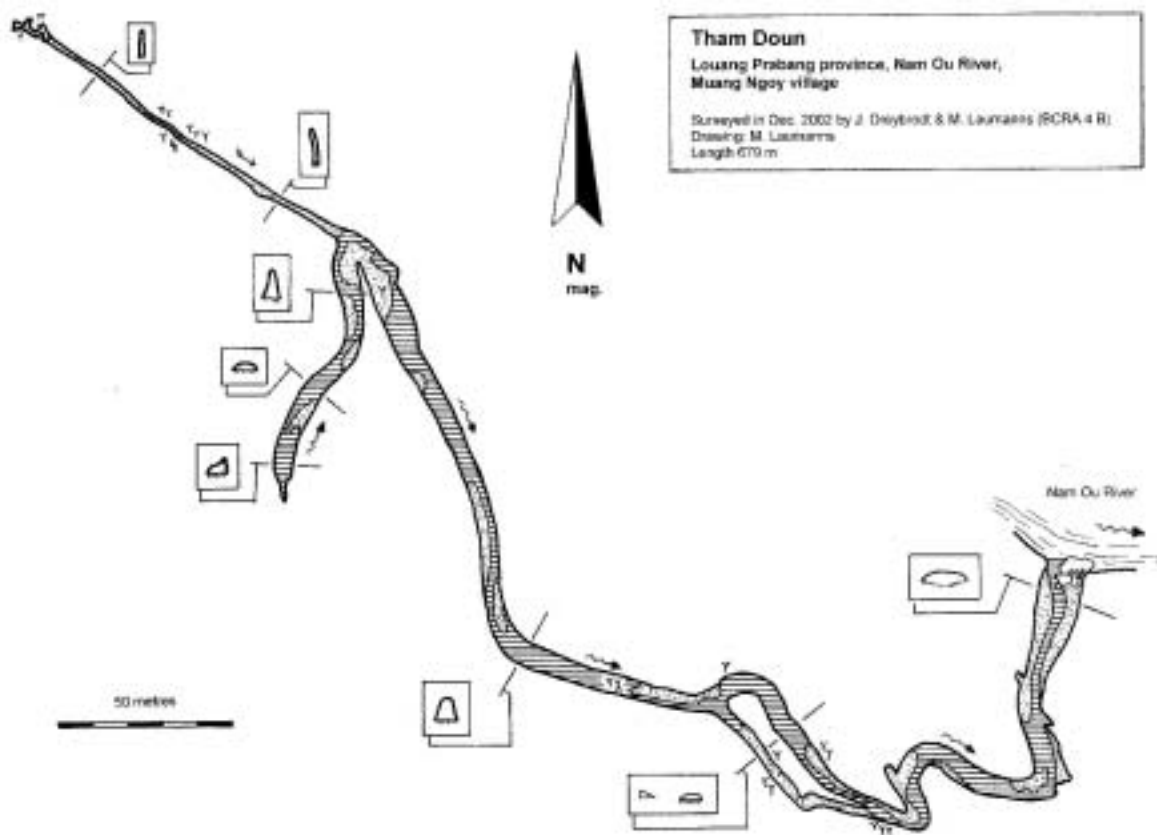
Length: 33m

**Location:** 30 minutes by boat upstream the Nam Ou from Muang Ngoy. The 6m high and 3 m wide entrance is clearly visible on the east side of the river.

**Description:** The entrance passage is oriented along the vertical bedding. It ends into a short crawl and continues into a parallel passage. The cave ends in an unpassable narrow claim filled crack. The entrance is used by fishers for overnight stays.



## Tham Doun



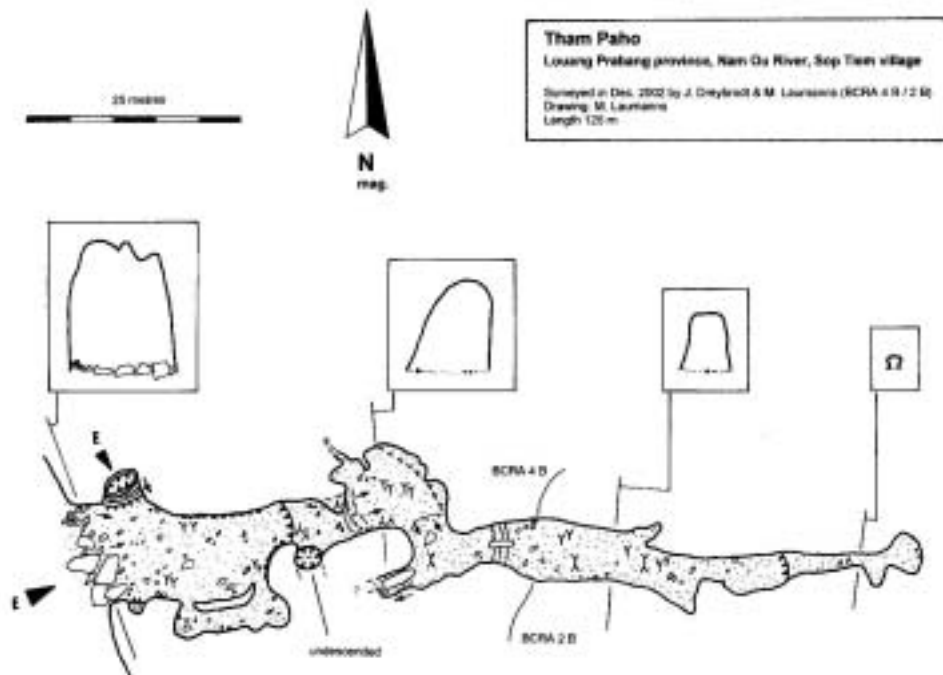
Length: 679m

Location: 35 minutes by boat upstream the Nam Ou from Muang Ngoy. The 15m wide and 3m high entrance is clearly visible on the west side of the river. It is divided by a rock into two parts.



Description: Tham Doun is an active river cave with a meandering main passage. A stream exits the cave on river level. During the rain season the Nam Ou floods the cave completely except the last higher short fossil part. The main passage has a nice mostly 5-8m wide and 6m high rectangular profile. The river bed consists of deposited gravel and clay whereas the ceiling is covered with beautiful dripstones and sinter waterfalls. The passage splits in the middle of the cave and unifies again after 50m. The cave ends after 560 m into a sump. The origin of the outflowing water could not be located. A visit during the end of the dry season might be useful to check for a opening. A 110m long side passage diverts before the siphon. It follows straight along a joint with long stalagmites that reach down to the floor. It ends after 100m into a small chamber. This part has an air stream that vanishes in the final chamber and comes probably from above.

**Tham Paho 1,2&3**



**Length:** Paho 1&2 approx. 30m each. Paho 3 is 125m surveyed, one open passage, because one guide insisted to return.

**Location:** The caves are located in the mountain south of Sop Chem at the foot of the cliff in approx. 150 meter height over river level. It is a 50 minutes walk without path through medium dense forest and bushes till the three entrances are reached.

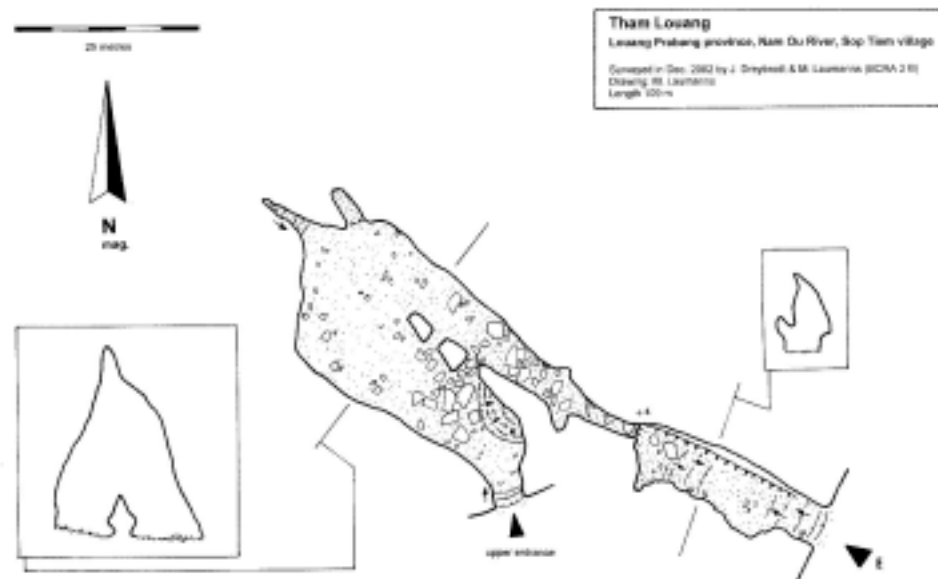
View out of the entrance of Tham Luang towards Tham Paho.



**Description:** Fossil cave with a large entrance chamber. A short climb to the left leads to a higher plateau of clay that descends afterwards. A straight 125m long passage opens to left with a nice 7m x 6m profile. The cave was used during the Vietnam war as a hiding place. Several hundred people of the village lived here over two years to escape the heavy bombing during day time.

### Tham Luang (Big Cave)

Length: 109m



**Location:** Near Village Sop Chem on the west side of the river. The cave is reached by a steep 15 minute climb up the mountain to a easy recognisable 5m x 10m wide portal. The cave entrance faces directly opposite Tham Paho across the river.

**Description:** Entrance passage that leads after a 4m climb to a higher level. A rock in the middle of the hall divides the cave into two parts with separate entrances. The cave was used as a hiding place during the Vietnam war.

### Tham Hoengu

**Length:** approx. 100m explored before the fearfull guide insisted to return on the sight of two poisonous centipedes, wide open passage.

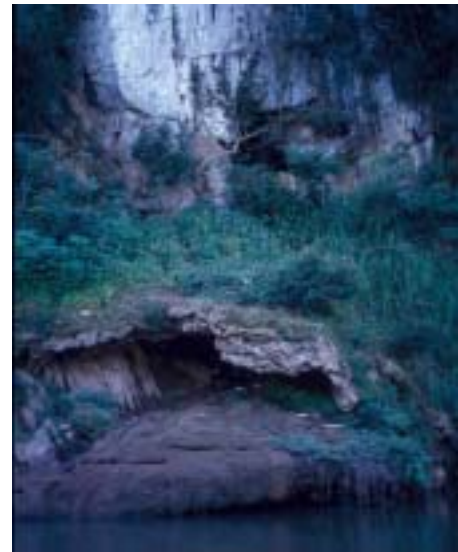
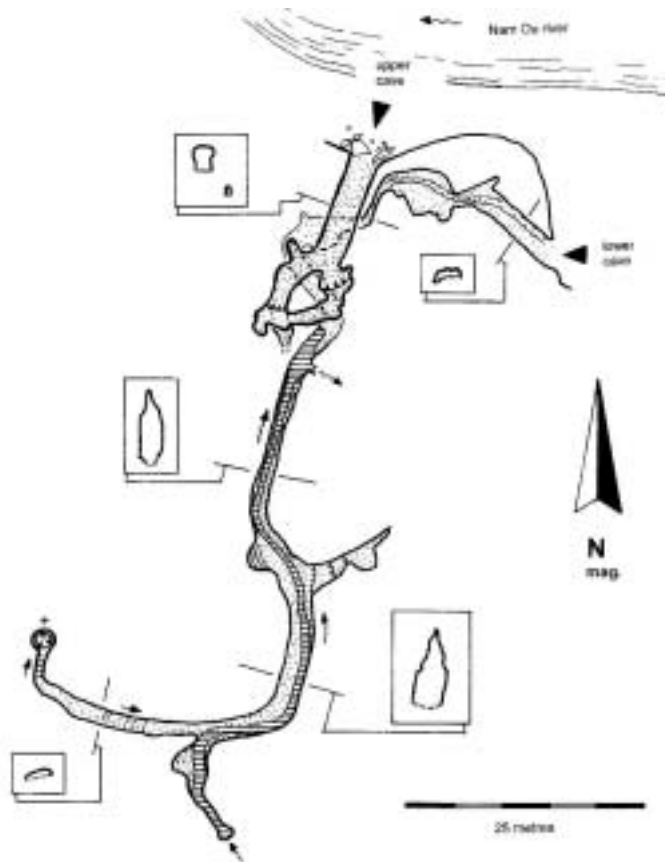
**Location:** Village Sop Chem, a footpath leaves the village behind the school to the North and crosses a small creek. The caves is reached after a 10 min footwalk where the last 100m are jungle without path. The cave is located at the right side on the higher lying edge of a limestone rim.

**Description:** Entrance hall with a wide passage that leads deeper into the mountain.

### Tham Paman

**Description:** Small cave of 20m on the west side of the river opposite to the village Sop Chem.

**Tham Pawee - Upper & Lower**



Length upper cave: 41 m

Length lower cave: 149 m

**Tham Pawee (upper & lower cave)**  
 Louang Prabang province, Nam Ou River, Ha Khen village  
 Surveyed in Dec. 2002 by J. Dreybrodt & M. Laursmaa (BDNA 4 B)  
 Drawing: M. Laursmaa  
 Length upper cave: 41 m  
 Length lower cave: 149 m

**Location:** South of Village Halkham and 75 minute by boat from Muang Ngoy. The cave is located in a isolated limestone mountain on the western side of the river. The mountain is easily recognisable since the landscape changed after Sop Chem to soft lower hills and the steep limestone rock is an exception.

**Description:** Upper cave: A straight passage splits after 10m into two side branches that connect to a common upper chamber with dripstone formations. The cave entrance is covered with various inscriptions in Lao and English.

Lower cave: A small stream flows trough a crack in the floor of a very muddy entrance chamber in the river. The cave continues on the right side by a straight 5m long and 0.5m high crawl. This leads to the main active river passage of about 2m width and 10-15m height. It ends into a narrowing crack with a active water flow. A higher dry 15m long side passage is reached by a 5m climb shortly before the end of the cave.

**Tham Pachiau**

Length: unknown

**Location:** South of Village Halkham in the same mountain as Tham Pawee. The entrance is easy recognisable by a door in about 15m height

**Description:** The cave hosts worshipped Buddha images as told by the guide. The entrance was formerly reached by a bamboo ladder, but the inhabitants of Halkham stopped to go to the cave and the ladder is destroyed.

**Tham Kham (Middle Cave)**

**Length:**  
200m estimated



**Location:** Muang Ngoy. The cave is reached by a nice 30 minutes footwalk along paddy rice fields on a track that starts behind the school. A stream flows out of the lower cave entrance into the Nam Ngoy. The main entrance is reached by a short climb to the left.

**Description:** A 8m wide and 5m high passage with nice drip stone formations and some side chambers follows straight into the mountain. The river flows in a lower bed on the right hand side. The cave ends in a lake with a siphon that connects to nearby Tham Pageo. The entrance part was used by soldiers as accommodation. Leveled sleeping areas and parts of metal bowls and tin cans are clearly visible. UXO Lao cleared the cave from remaining of weapons. The cave is used as the official show cave of the village. A 2000 KIP (0.20 US\$) entrance fee is collected behind the football field when leaving the village. The cave was surveyed by the Ami Caving Expedition from the Netherlands in November 2000.

**Tham Pageo (Holy Image Cave)**

Length: 1 km estimated

Location: Muang Ngoy, just 5 minutes further the path from Tham Kham.

Description: The entrance passage is for the first 100m only 1m high. The floor consists of thick mud cut trough by a small gully. The passage narrows two times into short muddy crawls. Finally a duck in a water basin is reached after 300m. It is necessary to get up to the neck in muddy water to pass. A nice top chamber branches of to the left about 10m before the duck. It hosts in the upper part dripstone formations with tinny crystal clear excentriques. Beyond the basin a wide passage continues to a long and high chamber. After 100m a passage opens to the left with a top chamber and a shaft that it is possible to climb down. At the bottom a stream way passage continues another 100m to a sump that connects to Tham Kham. When going straight the largest passage of the cave follows interrupted by short crawls. A large and very high canyon ends abruptly after 180m. Before the end is a passage to the right with a abundantly decorated chamber.

The cave is flooded in the rain season and therefore in general very muddy.

The cave was first surveyed by the Ami Caving Expedition (NL) in November 2000, some side passages are unchecked.

**Tham Pafan 1 & 2**

Length: about 25m wide and 10m high portals

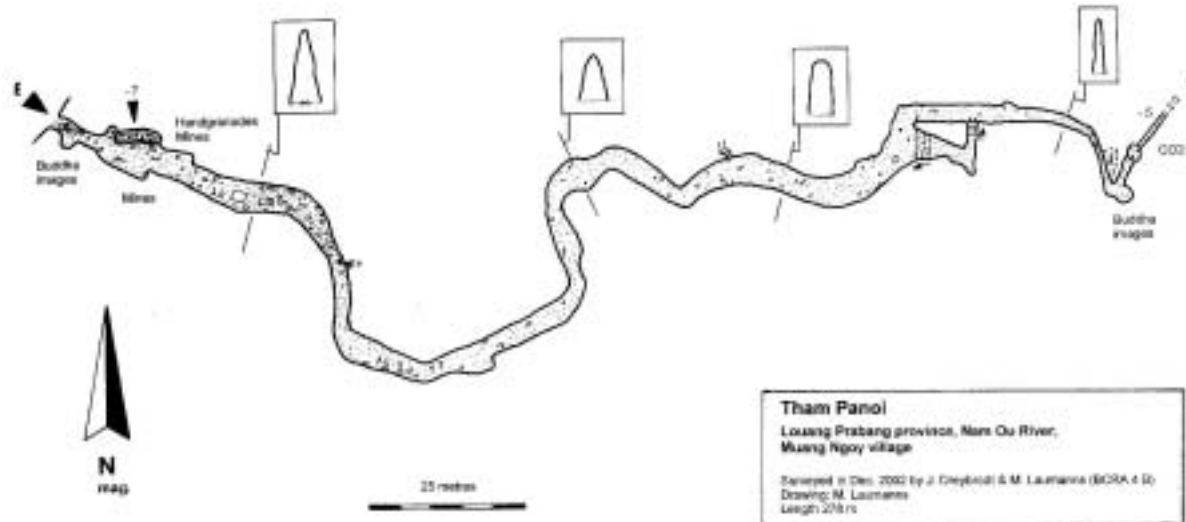


Location: Muang Ngoy, in the mountain south of the village across the Nam Ngoy. The opening of a big portal is visible in the limestone wall and is reached by a short climb. Another similar portal is on a higher level to the left.

Description: 30m wide portals of short depth with stalagmites hanging from the ceiling. Large nets covering the whole portal were placed over the entrance for the hunt of bats which are considered as a speciality. One alive bat was found in the middle of a net and photographed.

**Tham Panoi**

Length: 278m surveyed, open passage beyond a 5m deep canyon.



**Location:** Muang Ngoy, located in the limestone mountain north of Muang Ngoy. The cave is reached in a 10 minute walk on a footpath that starts behind the monastery. The inconspicuous entrance is located on the lower edge of a limestone rim that overlooks the Nam Ou river.

**Description:** Tham Panoi is a cave used by soldiers during the war which is obvious when the cave is entered. Several platforms and remaining of bamboo give an impression of the former sleeping places. In between pieces of hand grenades and landmines are scattered around mixed with rusty batteries and plates. Meanwhile snakes occupy the entrance as 3 complete skins indicate. The cave has a 7m wide and 10-15m high main passage that is nicely winding 270m deep into the mountain. A 5m deep canyon with a open passage on the other side marks the end of our survey. CO<sup>2</sup> may be the cause for the bad air quality. The cave is used by the monks of the monastery as a meditation place. Several small wooden Buddha statues are placed at the entrance and in a niche at the end. Our guesthouse owner told us that the villagers avoid the cave, because of bad spirits.

**Tham Nam Ngoy Noi**

**Location& Length:** Muang Ngoy, 100m further the path from Tham Pafan at the base of a limestone wall. The muddy bed of a stream comes from the 20m long cave and flows into the Nam Ou.

**Description:** 6m x 5m cavern with water polished walls. Three narrow mud filled stream passages enter into the cavern from different directions and leave into the stream bed. Two chimneys lead to a overlying higher chamber with nice dripstones.

**Cave pictures:**



Michael in the passage of Tham Panoi. This cave is a good example for the fossil type of caves based on the foot of the cliffs.



Mud covered shiny dripstone formations in the active river passage of Tham Doun.



Former sleeping place of soldiers in Tham Panoi close to the entrance. The floor is covered with remains of grenades and tins.



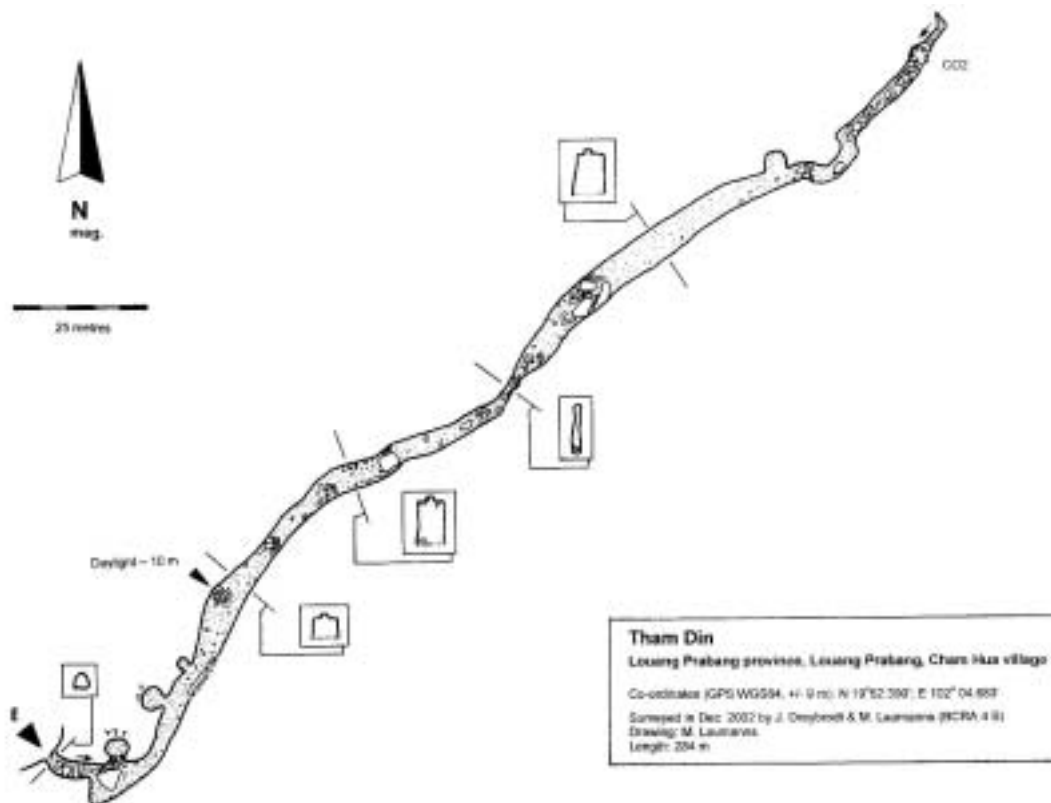
## Caves South of Luang Prabang



1. Tham Din
2. Tham Tatkeh

### Tham Din

Length: 284m, surveyed until a shaft with CO<sup>2</sup>



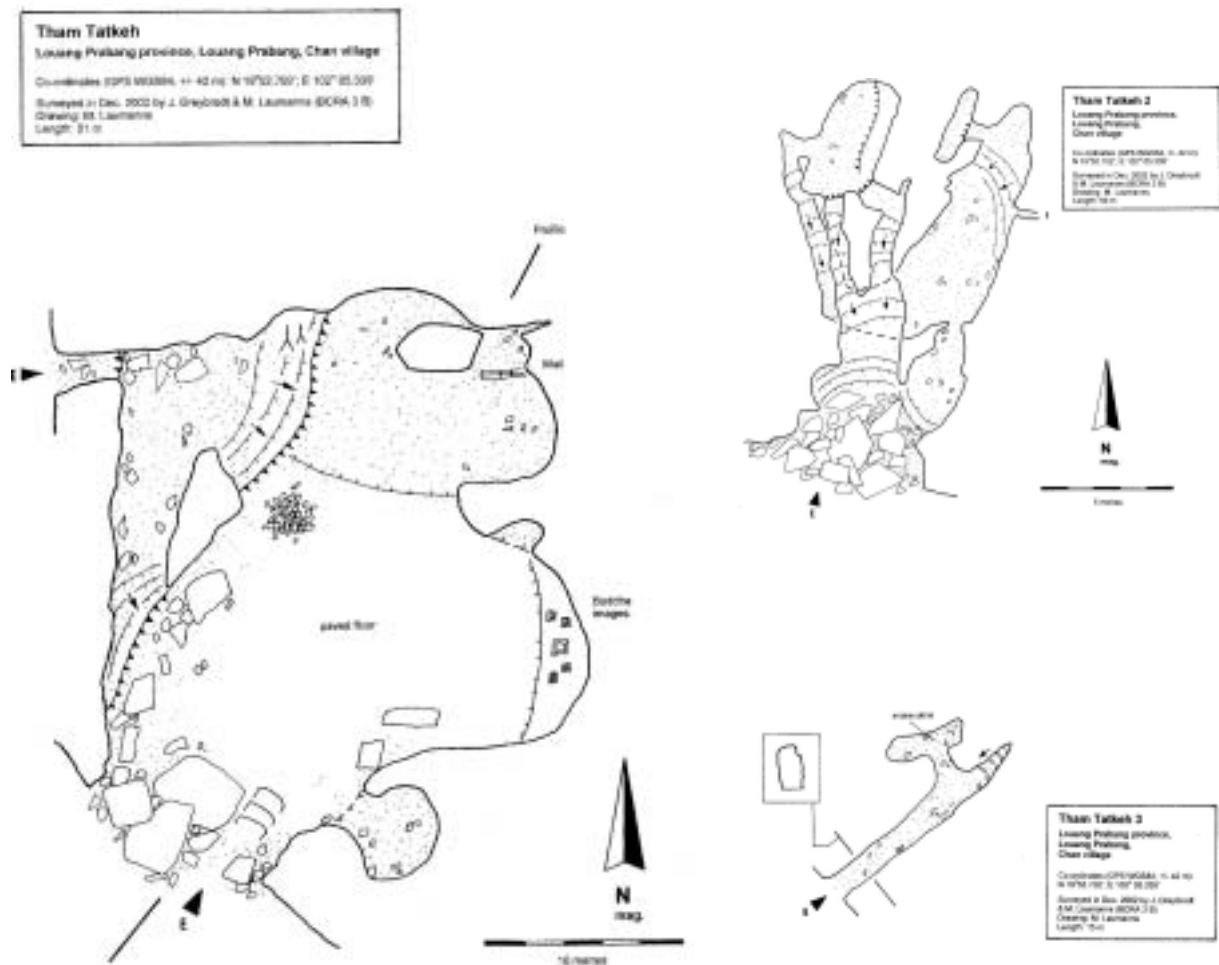
Location:

Village Chomngoua, 6 km south of Luang Prabang on the east side of the Mekong. A path leaves the village north of the monastery and branches off after 50m into a small path that leads almost up to the top of the hill. The 3m x 2m wide entrance is located on the upper part of a corn field.

GPS N 19°52.390'; E 102°04.683'

**Description:** Fossil cave with a straight 280m long main passage. The profile is rectangular and very pronounced especially in the rear part of the cave. A initial tube is visible on the ceiling. Huge rocks fallen out of the roof block occasionally the passage. Sad remains of a former large collection of wooden Buddha statues are placed in a small side chamber close to the entrance. A day light chimney is reached after further 20m. The passage end is marked by a 7-10 m deep shaft with remains of a bamboo ladder. A CO<sup>2</sup> lake prevented an attempt to descend into the shaft.

**Tham Tatkeh 1,2&3**



**Length:** 51m, 50m and 15m.

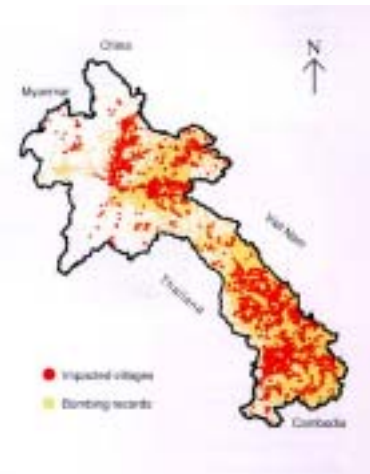
**Location:** 1 km up stream from Chomngoua on the west side of the Mekong. A isolated mountain hosts several chambers that is reached by a short climb. Parts of a old wood ladder and staircases are still usable. GPS N 19°52.702'; E 102°05.339'

**Description:** The 35m x 20m chamber of Tatkeh 1 has two levels. The attraction of the cave is a large Buddha image on a raised platform and remains of several others. Tham Tatkeh 2 consists of connected chambers with two entrances. Tham Tatkeh 3 is a short passage with a small side chamber. Several snake skins were found.

## Facts about Laos

### UXO and Bomb Shells

Unknown to most people Laos was since 1964 a side battlefield of the Vietnam war. It was strangely in everyone's interest to hide the presence of foreign troops on Laos ground why it was later also called "The secret war". From 1964-1973 the US run secret airforce dropped approximately 2 million metric tonnes of bombs against the joint North Vietnamese and Pathet Lao troops. This extend of bombing give Laos the sad record of being the most heavily bombed nation per capita in history. Two third of the country is affected by unexploded ordnance (UXO). Most incidences happens with children playing with found UXO and villagers doing work in the fields and forests. Therefore in almost every village posters of the UN Founded UXO Lao program are visible to increase the awareness of the people. The bomb remains are easy visible and casts are turned into useful items as stilts or plant pots by the pragmatic Lao people.



Map with the density of bomb records.



A house built of bomb shells as stilts in Muang Ngoy.



A wall with bomb shells as pillars in the main street of Muang Ngoy.

### Permits

A solid permission on provincial level is required for the visit of caves. This might be explained by the general attitude of communistic countries to have a tight control and that caves served as hiding places during the war and should be still concealed. Even in remote areas a government structure is functional and it is not easy to escape the system. Beside there are some more practical facts. The tribal believes in ghosts and spirits is strong and caves play a important role. They are considered to be special places and might be linked with bad ghosts or are holy places of the near by village. In one cave we were allowed to enter only after the guide had lighted essence sticks and mumbled some prayers to calm down the spirits. Therefore in any case before a visit to a cave the headman or eldest of the village should be contacted and asked for permission. It is also practical to hire a guide from the village since they know if there is any danger from UXO.

### Visa & Carbide

Visa on arrival valid for 15 days are issued at main border points for 30 US\$. Carbide called in Lao Tan Hin and is available in larger towns.

If you have any questions or comments we would be glad if you contact us !



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