Hang Son Doong

Part 2 of Steve Bourne's caving adventures in Vietnam and Laos

(all photos by Steve)

After the show caves and three warm up trips with Oxalis as tour operator, it was at last the date for the Son Doong expedition. There is no doubt Son Doong has an aura about it in the local village and among visitors to Phong Nha. Several visitors I spoke to were excited to meet someone visiting the cave and I exchanged emails with them to provide some pictures from my trip.

It is very widely promoted as "the largest cave in the world". One would initially think that the largest cave in the world would be a relatively easy task to determine. But then is it cave chamber, passage, volume, length... and so on? My understanding is that Son Doong has the largest cave volume of any cave in the world, something like 38M m3. The Miao Room in China is the largest chamber by volume and Sarawak Chamber in Mulu National Park, Sarawak, the largest chamber by surface area.

Measuring and determining what is the largest cave/chamber/passage is keeping a few dedicated researchers

very busy and very accurate scanning technology can provide high quality data. Then it just comes down to definition of a cave and what is in or out.

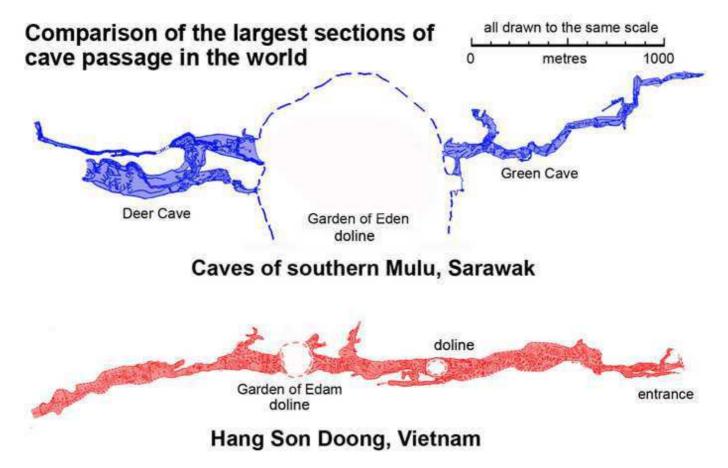
For example, Son Doong has enormous daylight dolines with jungle, are they part of the cave?

I recall the area between Deer Cave and Green Cave at Mulu, which is essentially a collapsed cave creating a "doline" that is so vast it does not look or feel like part of a cave. Having previously been to both Deer Cave and Sarawak Chamber, I looked forward to Son Doong, to see for myself.

Augusto, Lobo, Ezio, Lilia and I attended the compulsory briefing the afternoon prior to the commencement of the tour. Oxalis has a strict rule that if you fail to attend the briefing, you are not allowed on the tour. The briefing was delivered by Josh, a young member of the British Cave Research Association (BCRA). One condition of the permit for Oxalis to operate tours in Son Doong is that they must have a BCRA representative on the tour.

Other members who join the expeditions include Howard Limbert and his wife Deb, and other cavers who were part of the first exploration and mapping.

Josh was good company on the tour, but the skill level of staff which are BCRA trained seemed to make the position redundant. Maybe a case of doing a job too well and not being required anymore?



Comparison between Deer Cave, Malaysia and Son Doong Vietnam, sourced from the web (SB)

Homestay. Ho Khan has legendary status in the village as additional 2 safety assistants joined us for the cave exit. the discoverer of Son Doong in 1990. Over 15 years elapsed before he found the cave again with Howard Limbert.



Lobo, Steve, Ho Khanh and Augusto at the Home Stay

The expedition porters packed all of the equipment and supplies at Ho Khans' from early in the morning.

Our accommodation for the evening prior to the tour The support crew was astounding- 1 guide, 1 BCRA (included in the expedition fee) was at Ho Khan's guide, 5 safety assistants, 25 porters and 2 chefs. An

> Our group comprised my 4 Brazilian friends, 4 Vietnamese and another Australian Peter Bayliss, who was originally from Western Australia but now lives and works in Laos.

> As with other trips, we had a range of caving experience. Two of the Vietnamese were on their first ever caving trip. They had plenty of jungle hiking experience which is how they were allowed to pass the entrance criteria. They did a good job through the cave.

> Day 1 is nearly all above ground. It is a relatively easy 10km or so trek to the first camp site. Along the way, we stopped for lunch at Son Doong village. The village has just 9 families and 45 persons, with a huge imbalance of young girls who will leave the village looking for partners. The village would seem to have reached a point where it will not function for much longer. Despite being quite remote, the village was equipped with solar panels and good battery storage, generating far more electricity than they can ever use.

> The trek features many river crossings so feet become wet early in the trip. They remain wet for the next 2 days, with some respite on Day 3 but were wet again on the fourth day.

> Excitement rose when we set eyes on the entrance of Hang En from maybe a kilometre away. As we trekked closer, it grew bigger and bigger. Instead of climbing through the larger entrance, we accessed a smaller entrance to the right, and then climbed the rock pile for views of our campsite. This was a serious "wow" factor.



The view of the camp site in Hang En

Access to the campsite was gained via a raft across the river, although it was flowing so slowly it was virtually a lake.

Now we came to appreciate the support staff seriously. The porters had reached the site ahead of us and set up our tents, mattresses and sleeping bags, with names of expedition members on each tent. Toilet facilities were set up, with all waste collected in plastic bag lined buckets with rice husks added. All waste is removed from the cave.

The chefs had established their kitchen and "dining room" and begun preparing the evening meal.

We had some free time before dinner so I spent about 30 minutes swimming in the lake/river. So much for caving for days without a wash, I was super clean!

Our chefs provided an excellent meal and, as we were to discover, it improved every night. After dinner, we spent some time taking photos, placing lights inside tents to give colour. I really appreciated Lobo's knowledge on photographing large cave chambers plus the large number of flash bulbs he had brought with him. We took some trial shots to get camera settings correct for the tent light and dining table lights, and then arranged porters and other cavers to set off multiple flashes. We managed a very nice result.



View of the Hang En camp site at night (above)

On Day 2, I awoke early to a muted light coming through the enormous entrance to Hang En. What a way to start a day. The chefs were busy preparing breakfast - more of a morning banquet. As an early riser, this was frustrating for me as breakfast was at 8.00 am with the caving to start at 9. I was ready by about 6.30!

Hang En is the third largest cave in the world according to our Vietnamese guide (they have Deer Cave in Mulu at number 2). The exit to the cave is simply jaw dropping - an enormous cave entrance with a sandy floor with the jungle creeping in on all sides and up the cave walls. We were through the cave in quick time and then, following the river (which was at a very low level) onwards towards Son Doong.

Exit to Hang En (below)



Along the way, we learnt why Son Doong remained "lost" for so many years after Ho Khan discovered it. A limestone wall adjacent to the river had fallen and blocked the river and the original path he took to the entrance.

We left the river and climbed a steep path towards our lunch site, conveniently close to the Son Doong entrance. It took a few minutes to realise the strong breeze shaking the vegetation was actually coming from the cave. I took some video later when we descended into the entrance and it looks like footage of a minor hurricane, such was the strength of the wind blowing through the trees and the associated noise.

We were kitted with harnesses for the climb in by the safety assistants and checked by Josh. Then, one at a time, we climbed down the 80m of knotted ropes to the safety of the cave floor. The ropes are cleverly placed and you clip on to each section as you make you way down. The first part of the cave is a blur, I was in the largest cave in the world!

Dzung and Josh were brilliant at showing us good photo opportunities, but Lobo and I (and maybe others) were a little frustrated at not being able to look around to find our own shots. The group is kept to a strict path and there is little deviation from this - which is a good thing.

We crossed the river in the cave and spent some time photographing this.



A river crossing in the cave (above)

"Hand of Dog". The guide on the back formation is several hundred metres from the camera (below right)

Not long after, we saw the first glimpse of light from accurately named "Doline 1" - though it was quite some time before we reached it. At a point we could line up, with a safety assistant on a nearby formation and another hundreds of metres in the distance on a formation called "Hand of Dog", we traversed along an enormous passage.

As we walked towards the entrance, another "wow" moment as the camp site came into view. We took a side passage to look at fossils in the rocks and take a swim – a fantastic way to finish off a day's caving.



Another gourmet dining experience and lots of storytelling. Most of us were off to bed early and I spent some time speaking with Peter, the other Aussie in the group. With the early night, I woke up at a ridiculously early hour which gave me a chance to photograph the first rays of light through the doline.

Day 3 was a dry day - so for those who had carried (or had the porters carry) an extra pair of shoes, it was also a day of dry feet. I soldiered on with the same footwear, knowing I would be wet again the following day.

Early morning at Doline 1 with porters preparing for the day

In a trip of highlights, this was a special day. We split into 2 groups to photograph the "James Bond" hole and another scene.

The "James Bond" hole

We then had the opportunity t o photograph one of the truly iconic Son Doong images - that of people on a very large stalagmite within the daylight zone of Doline 2. When I look at the collection of images from this site, I noted that the promotional shots are taken with a very wide angle lens making the cave appear larger than it is (which is still really big!!).

My Brazilian friends posing at one of Son Doong's iconic photo spots







Progressing further, we could view back up into the doline as the sunbeams made an appearance. I have been in Vietnam for 9 days but had not seen the sun till now! However, at the appropriate time, the clouds parted and the doline was lit with an incredible shaft of light. I took dozens of photos at this point (as did everyone else in the group). Among many fine images, my favourite was a reflection of the doline in a shallow pool.

Once the sunbeam show finished, we ventured back into the darkness and viewed some cave formations of unbelievable size stalagmites up to 80m in height. The passage was enormous, but the feeling when we approached the next doline, filled with jungle, was certainly one of awe and amazement. Our guide, Dzung, made it very clear before we entered the doline that we were not to walk on the vegetation and that we were to strictly stick to the defined path. This appears to have been well adhered to as beyond the defined path the vegetation appeared pristine.

Classic Son Doong sun beam

I learnt a new term here, when Josh informed us the vegetation exhibits *phenotypic plasticity*.

This term describes where vegetation (in this case) exhibits different growth patterns inside the cave from the same vegetation outside the cave. Inside the cave, the plants deciduous, a response the reduced tο sunlight and nutrient levels, compared to their evergreen forms in the jungle above.

Hard to believe this is actually inside a cave!





One of the Brazilians, Ezio, had brought a laser range finder with him to check the measurements of the cave. Dzung would explain a passage was 150m high so Ezio would check. After a few cases of over statement passage dimensions, Dzung would ask Ezio to measure for him. The floor of the doline to the edge of the cave was about 200m, limit of Ezio's equipment. That's a really big hole!!!

An amazing site descending to our night 3 camp site



We were allowed a generous amount of time to photograph the jungle doline before descending to the camp site. After a brief rest, we went towards the cave exit to enable us to view the cave and take our photos so we could move more quickly through this section on our way out on Day 4.

We found the centipede endemic to the cave and a few other invertebrates.

The fields of cave pearls were amazing. I had run out of battery so photographed the pearls the following day. An important lesson in Son Doong is the need to take plenty of batteries and cards for your camera.



Cave pearls

The third night banquet exceeded the previous 2 nights as the chefs strived to outdo each other. Two additional safety staff joined us to assist with the climb out and kindly brought some cans of beer for us. Just when I thought the catering couldn't get any better, it did!

I awoke on Day 4 to the sounds of birds flying around the doline - lying in bed, looking up out of the cave from around 400m away, what an experience!

While we were packing up, I took a close look around the camp site to see how much waste was being left and impact on the cave. I picked up a cigarette butt, some small pieces of paper and plastic. When the porters saw what I was doing, they became quite agitated and Josh suggested that I not worry about it as the porters would clean up.

I photographed butts on the floor outside their tents and later recommended that each porter should carry a suitable container to place their butts in rather than put them out on the cave floor. It is easy to suggest they shouldn't smoke on the trip, but smoking is so much a part of their culture, I doubt you would get any porters. They only smoked at the camp sites which are near the cave entrances and dolines. The only person I saw smoking in the cave's dark zone was the park ranger who came along to make sure protocols were being followed!

A downside. Porters smoke at the camp sites and butts are left by tents. Most are collected in the clean-up but I did find butts from previous trips



After everyone was packed, we set off for the cave exit. When the passage has water, the group uses rafts to reach the Great Wall of Vietnam, an imposing wall of flowstone. It was dry so our group trudged around 500m along a narrow muddy trench to reach the climb out. The wall was fully rigged when we arrived, with the safety assistants in place. One at a time, we climbed the 30m fixed ladder; before switching to knotted ropes and climbing the near vertical wall. The flowstone has plenty of footholds and you are safely harnessed and expertly guided by the assistants across each section of wall.

While we enjoyed our lunch, the porters climbed the wall, each carrying large and heavy loads. I am sure all of us admired their strength and agility throughout the trip.

It is a short and easy walk from the top of the Great Wall to the relatively small cave exit. From there it was a few kilometres walking back to the waiting bus.

Part of the way along the walk out, we joined a familiar path - the exit path from the Hang Va cave trip from a week earlier. I have searched for (but can't find) a map showing the relative locations of the caves, which I imagine is deliberate to avoid having people trying to find their way to Son Doong themselves. Apparently this has happened a couple of times but with so many people at camp sites at the cave entrance and groups moving through daily, the chances of someone finding the cave and sneaking in would seem unlikely.



The fixed ladder at the Great Wall of Vietnam

Each group is treated to a final banquet dinner at the and meals the evening before and after the tour; Home Stay to celebrate the trip. We had a great meal and absolutely everything during the tour; high end celebratory drinks and were presented with medals for equipment; plus 30 support staff for the trip. How much "conquering" Son Doong Cave. After dinner, Peter and I would a cave tour in Australia or New Zealand cost with did the Australian thing and stayed at the bar by the pool 30 support staff for 4 days? until staff decided it was time for them to go to bed and the Australians could please themselves what they did.

by. A little extra on the \$4,000 tour price would not make a day will no doubt have an impact over time. much difference.

\$4,000 is a lot of money to pay for a cave tour, but when you consider what is provided for this, it actually feels like value for money. The tour fee covers accommodation

I was most impressed with the Oxalis enterprise. The guides were well trained; spoke good English; and One aspect I did not like was that we were constantly provided a balance of adventure and interpretation on reminded and encouraged to provide tips for the staff and each tour. There is a focus on protecting the cave porters. Each visitor was given an envelope to facilitate resource. Their attention to safety, without being in your tipping and you feel very obliged to do so, which I did. We face about it, was excellent. They employ large numbers were told that the visitor season lasts only 8-9 months of locals and have established the Oxalis Foundation to and guides and porters need additional funds for the off support local villagers. This contrasts sharply with the season. In my feedback form, I suggested that the wages way Phong Nha Cave is shown and not looked after. paid should allow for the seasonality and not rely on Paradise Cave is still in very good condition but the huge guests tipping for staff to have off season money to get numbers of people every day and large lights on for hours

To be continued in March 2019

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Only in the US? Unfortunately, it has sold!

House For Sale - A Living Cave \$2,750,000



If your not getting enough time in your cave during the day, how about living in one? Or maybe you're looking for a nice, cool retirement home? Well here you go... A single family home for sale in Parthenon AR for \$2,750,000 with 4 bedrooms and 4 full baths. This 5,572 square foot home was built in 1989 on a lot size of 256.90 Acre(s).

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cave on 256.9 acre m/l. Recently renovated, indoor waterfall, lodge is fed by an under-the-floor spring originating from deep within the heart of the cave. geothermal heating system, extra maintenance barn & apartment with horse

stables, helicopter landing pad, small spring-fed lake originating from the spring inside the cave which creates a waterfall o this lake, back-lit bluff line drive, short drive to the Little Buffalo River and all the local attractions. See for more details and photos by checking out the realtor's website: https://www.weichert.com/72043326/



