

# ASSESSING PHONG NHA: A VISIT TO THE KARST OF VIETNAM

- Elery Hamilton-Smith

Try to imagine one karst 'expert', probably well past his use-by date but refusing to admit it, tangled masses of rocks, tropical rainforest, the most sticky yet slippery clay in the world, and tropical darkness, all coming together in a mountain pass where the only path led down and up through 3 dolines, one of which was gigantic (or at least it felt that way!). This was the climax of an afternoon's walk of some kilometers over the rugged Phong Nha karst of Central Vietnam. But with a little help from my friends and a few good jolts of the very excellent locally produced vodka I made it!

But let's go back to the beginning. As chair of the IUCN / WCPA Working Group on Protection of Caves and Karst, I was asked to lead the on-site assessment of a nomination from the Government of Vietnam for the Phong Nha karst nature reserve to be granted World Heritage Status. The first challenge was to negotiate the complex bureaucratic demands, all of which led to the anxiety-provoking experience that my visa actually arrived on the night before my flight to Vietnam. Leaving out that journey, Hans Friederich of the local IUCN office and I arrived at Hue airport and were welcomed with immense bunches of flowers - it was just like being an operatic prima donna rather than a caver!

Just like Australia, Vietnam is often extremely competent and efficient but often totally incompetent and inefficient! It is also an exciting, dynamic, happy, welcoming, hectic country, sometimes frustrating but never boring - but as far as I am concerned the good certainly outweighed the bad - I look forward to going back!

Anyone who reads the *International Caver* will probably recall the many expeditions led by British caver Howard Limbert. Although operating in truly forbidding terrain, these expeditions found some truly spectacular river caves, so far surveyed for some 65 km. The nomination was largely based upon Limbert's enthusiastic description of the caves as the largest and most beautiful in the world. The first bit of bad news was that these claims are just not true. So, Hans and I found ourselves feeling very pessimistic and suspecting that we would have to say that it was just not up to scratch for World Heritage status. The second bit was that there seemed to be an astonishing lack of real research on or knowledge of the area. As one example of the frustration, none of the topographic or other maps agreed with each other, all had errors, and that the most recent, even with the use of landsat imagery and digital GIS, was just as bad as the rest!

Then the good news started. We had been led to believe that it was simply a matter of some big, relatively young, single generation river caves. The first day we went to Phong Nha cave itself - certainly a very large and handsome cave - and soon found a very complex system with multiple levels of karstification, changes in the route of the

river, exhumed pseudokarst, archaeological materials, etc., etc. We progressively came to realise that what we were seeing was a very complex and very ancient karst system. There were also some very complex geochemical and geomorphic interactions with the highly acid schists and granites resting on the top of the plateau, and this seems to have been instrumental in cave evolution.

The next day we walked part of the Ho Chi Minh trail alongside the Chay river to see the two immense springs which fed it, and on the way back visited Hang Toi, known as the Dark Cave, doubtless from the black lichen on the walls at the entrance. Then to one of the high level caves above Phong Nha. The third day then started to bring it all together. Again, we walked part of the Ho Chi Minh trail (a great experience in itself) to Hang E, and then to our amazement, came to an immense polje right in the middle of the reserve which nobody seemed to have previously recognised for what it was! Looking up at the surrounding mountains, we could see another high level cave, this time almost at the top of the plateau. This was also the day when we started to recognise the complex inter-bedding with shales and sandstones and the very complex geology of the Reserve, and it all climaxed as I described in my first paragraph above! Similarly, we had come to see that there were not just three vegetation units, but probably 12 or 15 of them, including some of the last of the tall lowland forests which once dominated much of SE Asia.

There were 73 species of animals officially recognised by the Red Book program as endangered or otherwise in trouble. Our pessimism was rapidly replaced with excitement, wonder and optimism. Phong Nha has the potential to be a great site for research on geo-history and chronology; it is a superlative example of a dissected karst plateau in contrast to other Viet karst which is generally either tower karst or cone-karst.

In spite of some continuing problems with poaching, etc., the park is extremely well looked after, while the management of Phong Nha itself - the one cave with public access - is sensitive and extremely well done. The pathways and steps are beautifully done and so unobtrusive that you hardly realise they are there. We were even more impressed with the understanding, leadership and commitment to conservation demonstrated by the chairman of the Provincial People's Committee. In turn, all of the officials and other staff show immense enthusiasm and vision in their respective tasks.

So, for a week, Hans and I walked the area, asked questions, sought out documentation, etc., etc. In between all of that, we had what seemed to be almost non-stop meals of numerous dishes, equally numerous toasts, and an immense amount of fun and laughing. To counter-balance

the walk described above, we found ourselves being cared for and virtually hand-fed by some very beautiful and charming young women tourist guides - I can't quite see that idea catching on in Australia! In due course, I will be glad to make our report available to anyone interested.

Then, already somewhat worn out, I was given a lightening tour of Hue, the old capital, and its architectural wonders before heading off on the long drive to the far north. Here I visited Ba Be lake, which is also to be nominated for World

Heritage Status. This is a wonderful freshwater lake enclosed in a ring of mountains covered in pristine forest which rise some 1,500 m. above the water. As we boated along the lake, I kept thinking of fiords! One of the highlights was being entertained as the first guest in the brand new home of the patriarch of the local Dai people. But after the long drive there, the park visit and more innumerable meals, toasts and speeches, then the long drive back, I was more than ready for bed, finally back in Hanoi for a last day of report-writing.